Pierre-François LeRoy: The Lesser-Known Brother of Julien LeRoy

By Robert St-Louis (CAN)

"It's not enough that a watch should give good service and work regularly during six to twelve months; it must do so during seven or eight years, if possible."
—Pierre-François LeRoy (April 1754)

Introduction

In France, and particularly in Paris, the name "LeRoy"[1] in clockmaking and watchmaking is synonymous with quality, prestige, and desirability. At least since the early part of the 18th century, many *horlogers* (*horloger* is the French term for watchmaker and/or clockmaker) named LeRoy have plied their trade and produced great numbers of timepieces through the many decades that followed. Not all LeRoys have direct family lines, so it is sometimes difficult to determine the connections between them, if any.[2] The story in this article deals with an older LeRoy family whose importance in the early days of watchmaking and clockmaking in the 18th century is undeniable.

Although much has been written, documented, and is known about the lives and works of the "celebrated" Julien LeRoy (1686–1759) and his "eminent" son Pierre (1717–85), little has been written about Julien's brother Pierre-François[3] (1687–1762), nor their father Pierre-Julien (b. 1658). Fifty years after some articles on the LeRoys were written by Brusa and Allix (who coined the qualifying adjectives above) in *Antiquarian Horology*,[4] it's time to revisit these great *horlogers* and add a bit to their story.

In the fall of 2019, the author acquired from a French collector a rare watch movement signed "Pierre LeRoy" and numbered "687," from the workshop of Pierre-François and dating from around 1730 (Figure 1).[5] This article will describe components of this watch, but more importantly will try to shed some light on the life and times of its maker, based on considerable documentary evidence the author has uncovered and, in most cases, translated from the original French. Thus, the largely forgotten Pierre-François will step out from the shadows of his famous brother and nephew and be given some deserved attention as an innovator and accomplished horological craftsman in his own right.

Figure 1. A view of the balance-cock side of the watch movement no. 687 by Pierre LeRoy, ca. 1730. Note silver disc and pointer at top to adjust hairspring length, and pointer at upper right used to set the speed of the repeating mechanism originally in the watch (now missing). AUTHOR'S COLLECTION.

The early part of the 18th century was a time of great innovation and discoveries in horology.[6] *Horlogers* in France (as in England and other countries) were constantly trying to find better ways to design and build clocks and watches so that they would become more reliable and accurate timepieces.[7] The search to accurately measure longitude, of fundamental importance to seafaring nations like France, England, Spain, and others, caused great attention and effort to improving the precision and dependability of clocks and watches. It had become evident that in addition to measuring the positions of the moon and celestial objects, accurate timepieces were going to be key in the competitive search for determining longitude. Eventually, timepieces provided the solution (see Gould).

Origins and Biographical Summary

The greatest of the LeRoy family is generally recognized as Julien, the oldest son of an *horloger* from Tours named Pierre-Julien LeRoy, a maître *horloger* who resided at Place du Grand Marché in the Saint-Clément parish. In 1685, the father was employed at the Château de la Carte, installing a *chapelet* (a machine used to draw water), and in 1698, he was tasked with restoring the large astronomical clock in the Tours cathedral.[8] Parts of this clock that bear his name survive

in the Tours archeological museum, where Pierre-Julien LeRoy is identified as a "locksmith-mechanic," which was the term used at the time. It's quite probable that Pierre-Julien's two sons (Julien and Pierre-François) accompanied and assisted their father as he worked on large clocks.[9]

In addition to his two sons, Pierre-Julien LeRoy also had three daughters:

- Françoise (1693–), who married Pierre Sénard (1690–1743), an *horloger* in Tours; they had several sons, probably all *horlogers*, including Julien Sénard, who will make a brief appearance later in this article
- Charlotte (1698–1741)
- Perrine (1699–1725), whose son Claude Heron became an *horloger* in Tours

Both Julien and Pierre-François were trained by their father in the trade of *horloger* and eventually moved to Paris for better opportunities (the older Julien settling there some years before his brother). They became accomplished *horlogers* and well respected in their guild (*Corporation des horlogers de Paris*), eventually setting up shop and living not far from each other in the rather exclusive Place Dauphine area on *Ile de la Cité*, in the very heart of the city of Paris (Figure 2; see Appendix IV).[10]

It's well known that a firstborn child usually will have advantages over younger children in a family dynamic.[11] When Pierre-Julien LeRoy chose one of his sons to train as an apprentice, it was the older Julien who initially benefitted from most of his attention and no doubt always remained a step ahead of his slightly younger brother Pierre-François, who may have been given less-challenging tasks in their father's shop. The two brothers may also simply have been of different temperaments that predisposed the older brother to seek and prosper in the limelight and the other to quietly work his craft in the shadow of Julien. Throughout their lives, Julien attracted more recognition for his work and products, and he achieved greater fame and historical prominence in 18th-century horology.

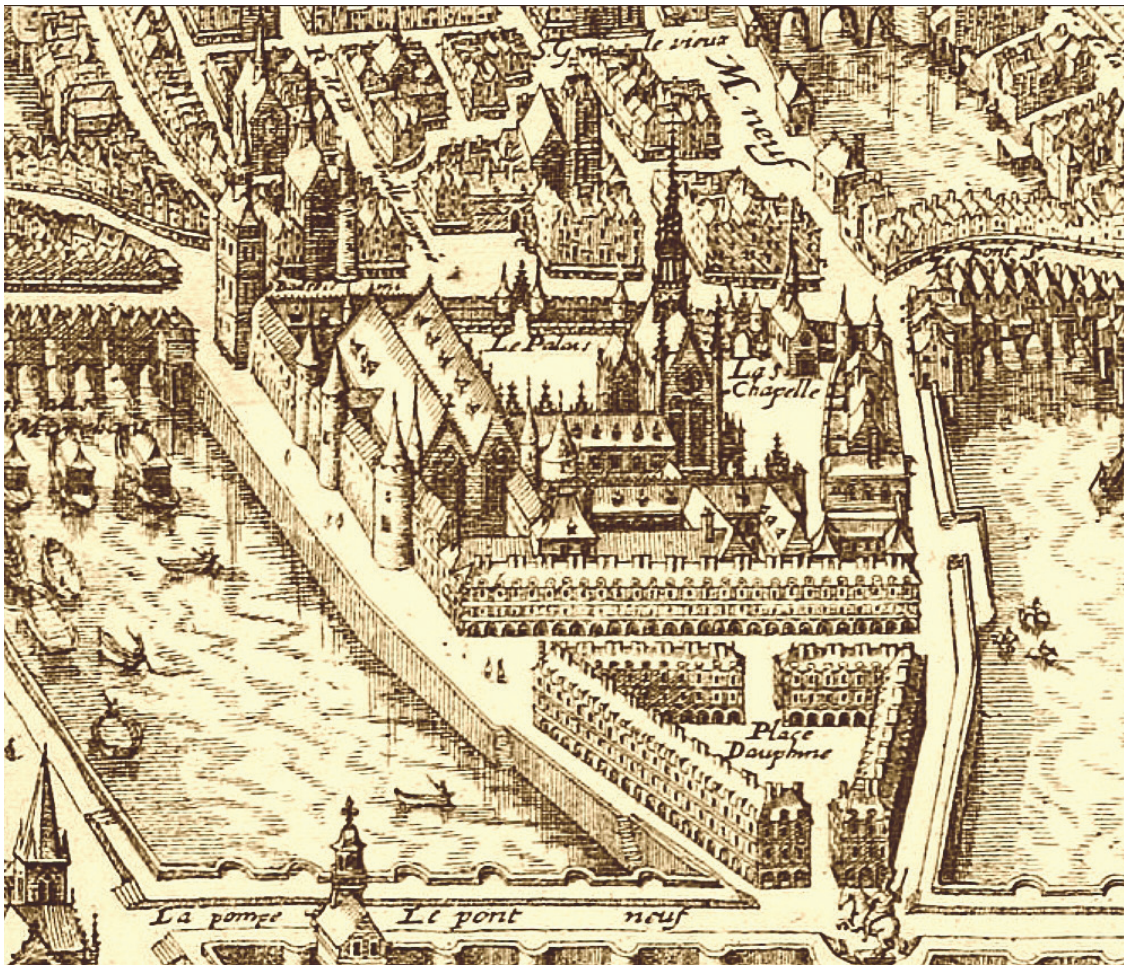


Figure 2. Map of Paris from 1615 showing Place Dauphine in the lower section, where the LeRoy brothers' horological shops were located. PUBLIC DOMAIN.

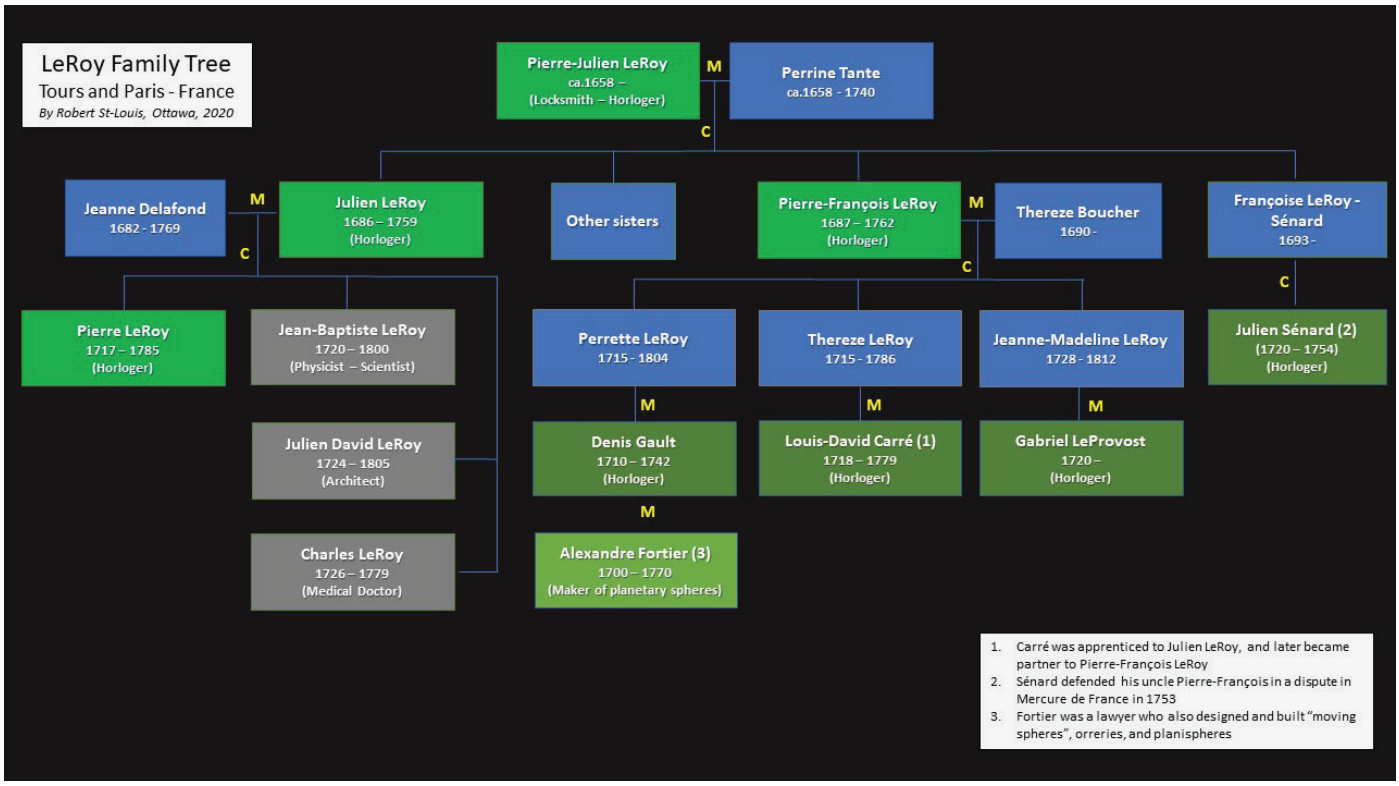


Figure 3. LeRoy family tree of the branch of LeRoys focused on in this article. PRODUCED BY THE AUTHOR.

All sibling dynamics aside, both Julien and Pierre-François benefitted from the same learning opportunities in their father's shop in Tours. They probably learned additional skills from other *horlogers* in the family or neighborhood. They both grew up to be excellent craftsmen and *artistes*.[12]

Julien LeRoy married Jeanne Delafond in Paris, and they had four children, all sons. The oldest son, Pierre (1717–85), followed in his father's footsteps and became an eminent *horloger* in his own right, notably advancing the development of the French marine watches in the quest to accurately measure longitude at sea. The three other sons were all very well educated and held highly respectable positions in their respective disciplines (physicist/scientist, architect, medical doctor and lecturer). By the early 1800s, none of the later descendants of Julien LeRoy were still engaged in horological work.[13]

Pierre-François LeRoy married Thérèze Boucher in Tours, and they had no sons but three daughters, all of whom married *horlogers* (Perette married Denis Gault; Thérèze married Louis-David Carré, who had been apprenticed by Julien and later became Pierre-François's partner;[14] Jeanne Madeline married Gabriel Joachim LeProvost; see Figure 3). The good standing and honorable profession held by their father probably influenced the daughters to marry *horlogers* themselves. Many such well-trained young men no doubt abounded in their father's shop or in the numerous other shops (including their Uncle Julien's) around Place Dauphine.

Julien and Pierre-Francois's families in Paris undoubtedly remained close over the years and probably attended religious services in the same church, St-Barthélemy, near Place Dauphine (Figure 4). Although the two brothers always had separate businesses, they and Julien's eminent son Pierre undoubtedly, either through business dealings or at numerous family gatherings, discussed and exchanged ideas about horological inventions and improvements (exemplified by their various memoirs and publications over the years).

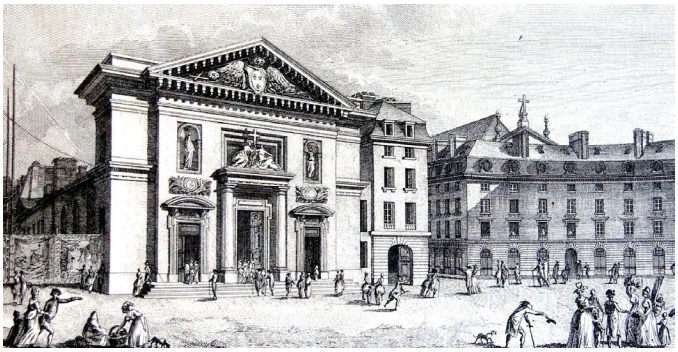


Figure 4. St-Barthélemy church in Paris, where the families of Julien and Pierre-François LeRoy attended church ceremonies. It was destroyed in 1868. PUBLIC DOMAIN.

The life story and important achievements of both Julien LeRoy and his son Pierre have been told many times. An overview is hereby presented (admittedly short and incomplete) to provide necessary context upon which to discuss the elusive life and work of Pierre-François LeRoy.

The Celebrated Julien LeRoy

Legend has it that Julien (Figure 5) was building his first little timepieces at the age of 13 and would sometimes get up during the night to perfect them. At 17 years old, his father sent him to Paris to further study horology with some masters there (he may have worked under Charles Le Bon). He quickly became one of the ablest workers and was known for his dexterity. He was accepted by the guild as *maître horloger* (master watch/clockmaker) in 1714, at the age of 28, and married a year later.

In 1720, still somewhat early in Julien's career, one of the greatest members of the *Académie royale des sciences*, the mathematician Joseph Saurin, wrote of him: "Assisted by knowledge of geometry, he has penetrated all corners of his Art, and unites the most delicate of handiwork, with the most perfect and finest theory."[15] In 1739, Julien was honored with the title "*Horloger du Roi*" ("watchmaker to the King"[16]) and given an apartment in the galleries of the Louvre (which it is said he did not need so he gave it to his son Pierre to use[17]). This allowed him to devote some time, in addition to running his busy shop, to carrying out research projects aimed at perfecting his art in different areas.

Figure 5. Portrait of Julien Le Roy (1686–1759), which attests to him being "*horloger du roi*" and "past director of *Société des Arts*". PUBLIC DOMAIN.

Because of his numerous inventions and improvements in the design and construction of watches, he is sometimes referred to as the "Tompion of France." He played a key role in elevating the status and quality of horological craftsmanship in France after the serious decline that followed the revocation of the Edict of Nantes in 1685.[18] Julien raised the level of craftsmanship, in part, by openly sharing the details of his innovations in several articles and memoirs that he wrote and published over the years.[19]

Although Julien is best known for his influential innovations in watchmaking, he also produced fine clocks and excellent sundials (which remained an important device during that period, to adjust the times of clocks and watches). Julien also created the "horizontal" tower clock movement. In a departure from traditional institutional clocks having a "vertical" layout, Julien rearranged the components to work in a more horizontal layout, which required fewer parts, reduced friction, and greatly simplified maintenance. He described this novel approach in his new edition of Sully's *Règle artificielle du temps* (1737). Clearly, the teachings he had received from his father, Pierre-Julien, who had worked on tower clocks in Tours, inspired Julien in this regard.

Julien was reputed to be very generous with his workers, regularly increasing their salaries and rewarding work done well. Partly because of his generosity, some have said that in spite of a long life of hard work, he died leaving only a modest fortune.[20] In *Etrennes Chronométriques* (1760), his son Pierre wrote of his father: "He ignored the pains he gave himself to train able craftsmen at a time where they were quite rare…he sacrificed for them part of his wealth, not only encouraging them by his advice and example, but also rewarding them as much as his means allowed."

Some of Julien LeRoy's numerous horological inventions and innovations include the following:

- Capillary oiling of pivot holes, to hold oil in place and help ensure that pivots do not run dry
- "Horizontal" design of tower clock movements, which greatly simplified their construction and maintenance
- Adjustable pocket watch potence (the potence provides a resting spot for the balance/crown wheel interior pivot, which LeRoy's innovation allowed to be adjusted without needing to take the watch apart, as was the case for English watches)
- Steel cockerel on balance cock (a piece of polished steel screwed into the top of the cock,

providing the landing spot for the upper pivot of the balance wheel)

- New designs for repeating and alarm watches (use of wire gongs instead of bells)

The "Eminent" Pierre LeRoy

Pierre benefitted from all the instruction and insights given to him by his father, Julien, as he was apprenticed and later worked in the paternal shop for many years. When Julien died in 1759, his son took over his shop and continued producing timepieces with the signature "Julien LeRoy" for many years. He did this in homage to his father's legacy but also to ensure the livelihood of the many faithful workers who had been employed and trained by Julien.[21] Pierre only placed his own signature on a few marine clocks that he later produced, when this important area of horology became his passion and mission during the second half of his life (Figure 6).

In his remarkable work, *The Marine Chronometer*, Rupert T. Gould wrote of Pierre:

> If we contrast [Pierre's] marvellous machine with [Harrison's] No. 4, which, in its own way, is equally wonderful, LeRoy's superiority as a horologist is evident. Harrison took the escapement, balance, and general arrangement of the ordinary watch of his day, and by fitting a remontoire and maintainer, an automatic regulator, and diamond pallets, aided by high-numbered wheels and pinions with lavish jewelling, he compelled it to become an efficient timekeeper. LeRoy attacked the problem from an entirely different standpoint, and obtained his results not by nullifying defects, but by eliminating them. The difference in their machines is fundamental–Harrison built a wonderful house on the sand; but LeRoy dug down to the rock. . . . LeRoy's timekeeper was an entirely new departure, and the credit of having designed and constructed the first modern chronometer is entirely his, and his alone.[22]

Others have been equally complimentary in their assessment of Pierre's work.[23]

In 1907, a watchmaker named Lavenarde wrote these words about Pierre LeRoy, which seem to summarize well the general impression that students of horology have about him: "Pierre Le Roi, poor, modest, quiet worker, without patronizing and protecting influence, guided by the works of his father, gifted with a rare genius, using his talents, fathered marvelous things."[24]

Some of Pierre LeRoy's horological inventions and innovations include the following (Figure 7):

- Duplex escapement and Détente (first detached chronometer) escapement

Figure 6. Portrait reputed to be of Julien's son, Pierre LeRoy (1717–85); his marine chronometer is displayed beside him. PUBLIC DOMAIN.

- Compensation balance (mercurial and bimetallic—to prevent expansion/contraction impacts of temperature differences)
- Method to obtain an isochronous balance spring (where the long and short arcs of the balance are performed in the same time, improving regularity of the watch)

Pierre-François LeRoy

As already discussed, Julien's brother Pierre-François was also apprenticed in their father's workshop and moved to Paris at a later date than Julien, preferring to ply his trade in his native Tours for some time. This allowed him to continue working with and learning from his father for many years after Julien had left for Paris. Pierre-François married in his native town in 1714, fathered his first two daughters, and in 1719 was known to still be making watches in Tours.

Although a fulsome painting of his brother Julien exists, and a miniature portrait is attributed to his nephew Pierre, no likeness of Pierre-François has come down through the centuries, adding to the mystery surrounding this man. The usual reference for French *horlogers*, Tardy's *Dictionnaire des horlogers*, only succinctly mentions Pierre-François. It states that he was made master *horloger* in Paris in 1721, and errs in saying that he died childless (genealogical research has made it clear that he in fact fathered three daughters, all of whom married *horlogers* as previously indicated).

One could surmise that Julien's son Pierre also benefitted from guidance and advice from his uncle, Pierre-François. The qualities generally conferred on Pierre—modest, quiet, talented, and creative—could probably also be applied to Pierre-François, whose temperament and writing style, based on a study of his works and writings, seemed to bear more resemblance to his nephew than to his brother, Julien.

Appendix III lists some of the memoirs and texts that were published by Pierre-François from 1728 to 1754. These works describe some of his notable horological inventions, as well as his views on different aspects of the evolving discipline of watchmaking and clockmaking during the middle part of the 18th century. A couple of his letters, published in the *Mercure de France*, offer particular insights into his views on horology and his

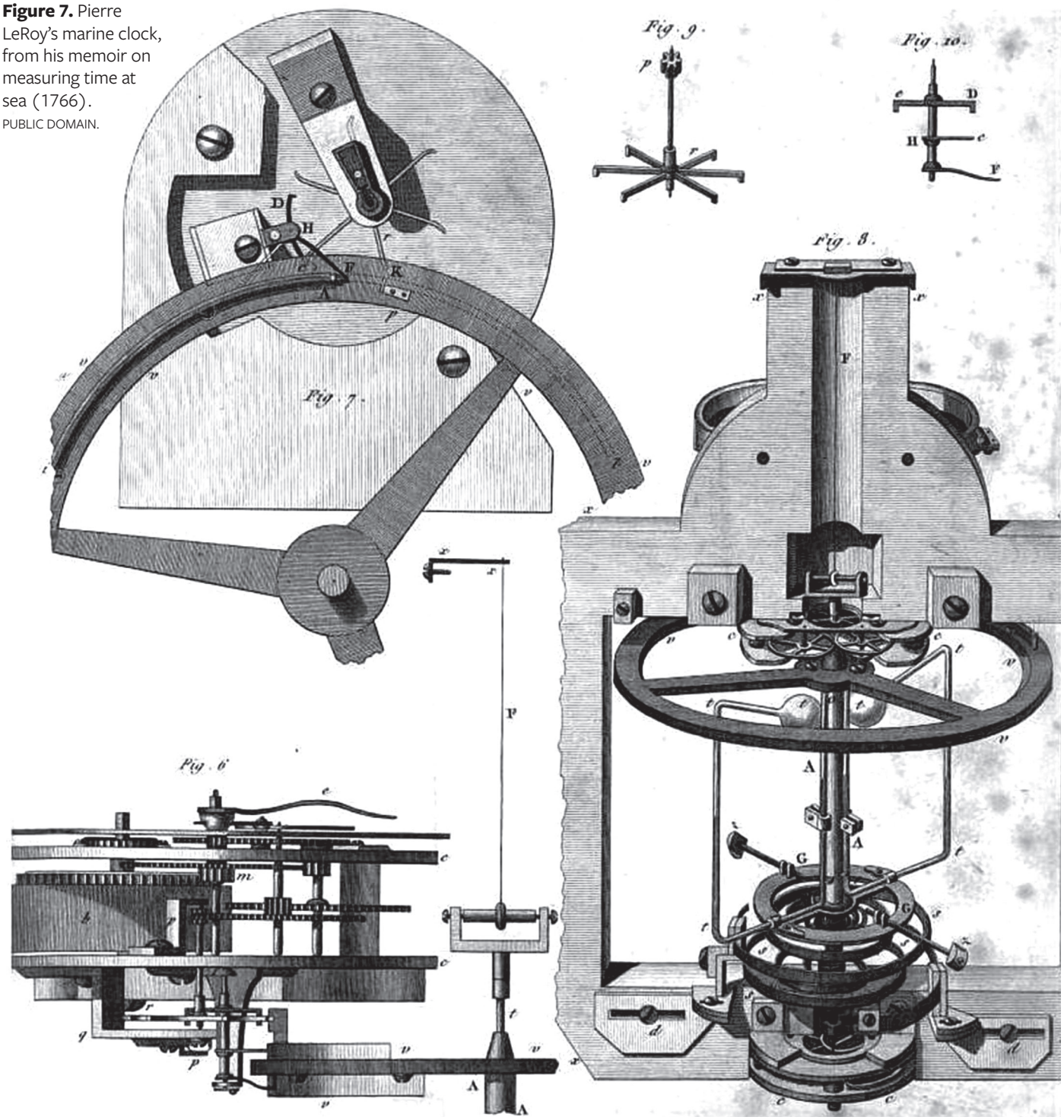


Figure 7. Pierre LeRoy's marine clock, from his memoir on measuring time at sea (1766). PUBLIC DOMAIN.

personality, and are discussed later in this article. They reveal him to be intelligent, articulate, modest, and respectful, yet at the same time an effective defender of his views and opinions. Again, the similarity with his nephew Pierre is striking in this regard.

Although this article focuses mostly on Pierre-François LeRoy's outstanding work as a watchmaker, it is important to remember, as some contemporaries indicated, that he was likely an even better clockmaker. Certainly, many of the best museums in the world contain examples of Pierre-François LeRoy's fine and beautiful clocks.

It should be noted as well that Pierre-François was voted by his peers in the Parisian community of *horlogers* to the important role of *garde-visiteur*[25] during the period 1744–48. This was a sign of the respect and good standing that he held within the community. His brother had carried out the duties of the *garde-visiteur* during the period 1735–37.

Some of Pierre-François's horological inventions and innovations include the following:

- Clock showing "true" time; equation clock that strikes "true" time
- Clock striking quarter-hours and incorporating "all or nothing" repeating mechanism
- New watch escapement based on Debaufre, and an improvement of Graham's cylinder

The Royal Academy of Sciences and the Arts Society

Two French institutions became vehicles for Julien, Pierre-François, and Pierre LeRoy to publish and defend some of their respective horological advancements and inventions over their careers. It is useful at this time to describe these organizations.

The Royal Academy of Sciences (*Académie royale des sciences*) was created in 1666 by King Louis XIV to encourage scientific development and progress in France. It consisted of renowned and respected scientific experts in various disciplines and met regularly at the Louvre. Every year, it published a book containing all the work done by the *Académie*, memoirs presented to it, inventions approved by it, etc. During the early part of the 18th century, the *Académie* placed increasing attention on horological inventions and developments. The quest for the determination of longitude at sea greatly preoccupied maritime nations like France, England, and Holland, among others. Both Julien and Pierre-François LeRoy presented memoirs to the *Académie* on horological improvements that they had created. Julien's son Pierre later frequently presented to the *Académie*, particularly on his extensive work on marine chronometers.

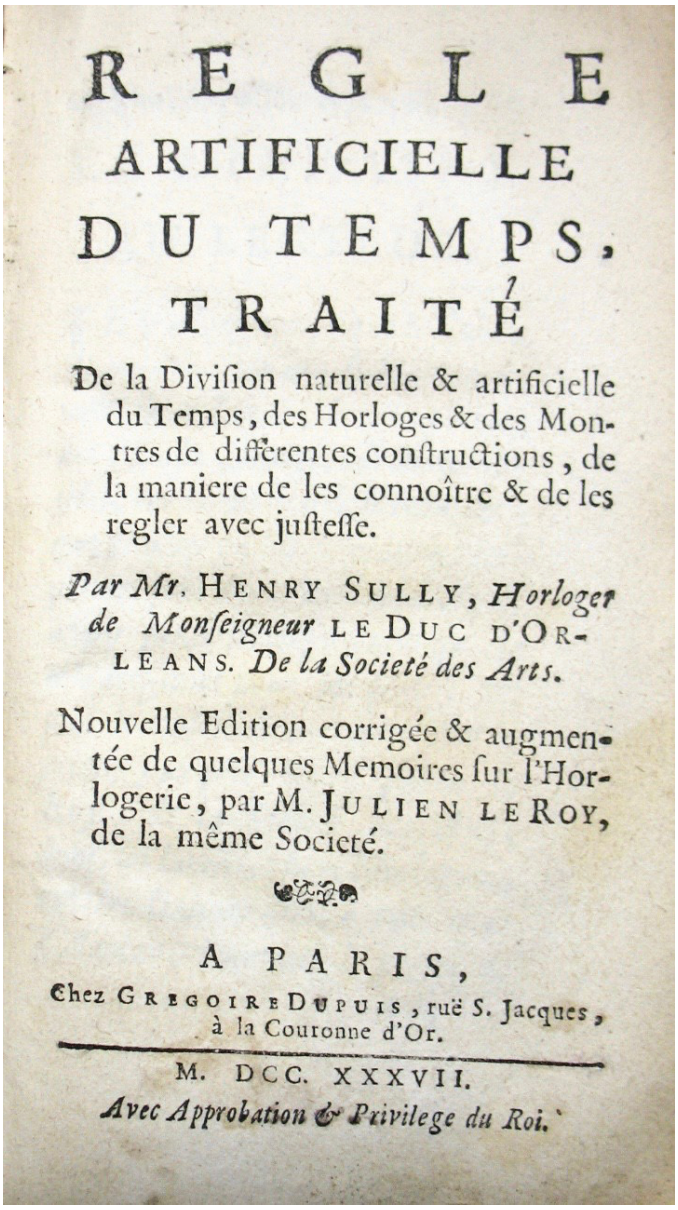

RÈGLE
ARTIFICIELLE
DU TEMPS,
TRAITÉ
De la Diviſion naturelle & artificielle du Temps, des Horloges & des Montres de différentes conſtructions, de la maniere de les connoître & de les regler avec juſteſſe.
Par Mr. HENRY SULLY, *Horloger de Monſeigneur* LE DUC D'ORLEANS. *De la Societé des Arts.*
Nouvelle Edition corrigée & augmentée de quelques Memoires ſur l'Horlogerie, par M. JULIEN LEROY, de la même Societé.
A PARIS,
Chez GREGOIRE DUPUIS, ruë S. Jacques, à la Couronne d'Or.
M. DCC. XXXVII.
Avec Approbation & Privilege du Roi.

Figure 8. Title page from Sully's *Règle artificielle du temps* (1737). The title indicates the connection to the *Société des Arts* for both authors, Henry Sully and Julien LeRoy. AUTHOR'S COLLECTION.

In 1728, the *Société des Arts* was created in Paris as a meeting place and knowledge exchange vehicle for many "artistes" who felt that the *Académie* was not doing enough to improve the mechanical arts, including horology. The *Société* was created by Englishman Henry Sully, by permission of the French regent.[26] Some of the founding members also included the brothers Julien and Pierre-François LeRoy (Figure 8).

Members of the *Société*, like those of the *Académie*, met occasionally to discuss, collaborate, and share knowledge on matters related to the mechanical arts. Although its principal founder, Sully, passed away in 1728, the *Société* continued to attract new members. This growing

membership concerned the *Académie*, seeing the *Société* as a possible competitor.[27] The *Société's* activities gradually declined and ceased around 1737, which coincided with the publication of the new edition of Sully's book (*Règle artificielle du temps*) by Julien LeRoy.

There is at least one clock by Pierre-François LeRoy that indicated on the dial "*Membre de la Société des arts*" ("Member of the Arts Society"). This suggests that Pierre-François (and other members) saw a benefit in identifying their membership to this *Société* on their work.[28]

Another notable member of the *Société* was the Englishman William Blakey, who had come to France in 1718 to direct one of John Law's factories in Normandy. This factory made steel for watch mainsprings, hairsprings, and pinion wire. These products were used at the watch factory in Versailles that was run by Sully. Prior to Blakey bringing this English knowledge into France, the French had been dependent on importing such steel from England. It was Blakey who introduced Julien LeRoy to Henry Sully, and the two became great friends. Blakey died in 1748 but his son, also named William, had followed him to France and continued leading this business for many years, becoming friends with *horlogers* like Julien and Pierre-François LeRoy.

In 1780, Blakey published a very important book in French, whose English title is *The Art of Making Watch Mainsprings, Repeater Springs and Balance Springs*. This book served as a guide to other spring makers in France. Many years later, an excerpt (on the subject of *horlogery*) from Blakey's book entitled "Mr. Blakey's Comparisons on the French and English Arts" was printed in the *Gentleman's Magazine* of April 1792. In the article, Blakey talks about English makers like Thomas Tompion and George Graham, and French *horlogers* that he knew well, including Henry Sully and Julien and Pierre-François LeRoy. About the latter two, he wrote: "The French are much obliged to [Julien LeRoy] and his brother Peter, as they were the two who most contributed to the brilliancy of their clock and watch-making; Julien most in watches, and his brother most in clocks. They were both ingenious and worthy men; I had the pleasure of knowing them particularly."[29]

Pierre-François Defends French Watchmaking against the English

Like his more famous brother Julien, Pierre-François also played a role in defending the honor of French horology against the dominant reputation of the English. In a letter written to a fellow member of the *Société des Arts*, published in the *Mercure de France* in April 1744, Pierre-François recalls that in November 1737 he had received a letter from M. de Villeneuve, engraver to the King of Portugal and member of the Lisbon Academy, telling him that he had engaged in a wager with Englishmen about whether France or England made the best watches, for a sizeable amount of 100 gold pieces. Villeneuve no doubt was aware of Pierre-François' reputation as an *horloger* and asked him to make him a fine watch that could ably compete with an English watch (which would likely be made by George Graham, whose reputation was known around Europe). LeRoy agreed, saying that it would give him pleasure to defend the honor of France and provide him with an opportunity to apply himself and use an escapement of his own invention (which he described as an improvement on Graham's cylinder escapement). This escapement had been presented to the *Académie* in 1741 (Figure 9).

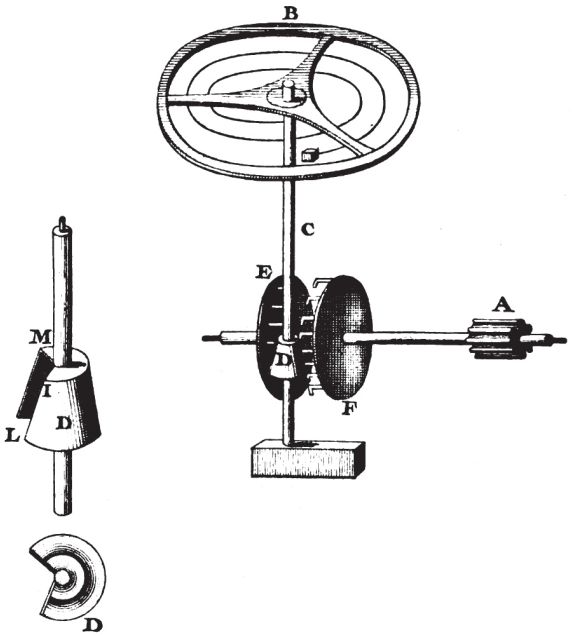


Figure 9. Pierre-François Leroy's new watch escapement (1741) inspired by one by Debaufre (1704). Many authors have incorrectly assigned it to Julien's son, Pierre LeRoy. PUBLIC DOMAIN.

It appears that the wager allowed ample time for the English and French sides to come up with the best watch for evaluation. It is said that when he was younger, Julien had once built an entire watch, including the repeating mechanism, in only eight days. In this wager, Pierre-François clearly took his time (over a year) and used all his skills to build a watch that was as perfect as he could make it; certainly, the intricate new escapement would have taken a long time to perfect. Pierre-François completed his watch in March 1739 and delivered it to Villeneuve the following month. In October of that year, Pierre-François received a letter advising him that in the presence of the Prince of Brazil, both parties had inspected the timepieces and agreed that "both watches had been deemed perfect," and both watchmakers were praised and applauded. Pierre-François was thus successful in demonstrating that the French could indeed construct a watch just as good as the best the English were capable of.

In the same *Mercure* article of 1744, Pierre-François also recalled that he had been involved in a previous instance of defending France's reputation in 1719. At that time, LeRoy was still living and working in Tours and had been approached by the famous Parisian *horloger* Pierre Gaudron (on the recommendation by his then already famous brother Julien). Gaudron asked Pierre-François to make a repeating movement based on a watch that Gaudron had seen and been impressed by (possibly Pierre-François was supplying watches and/or movements to his brother Julien for sale in his shop in Paris). This was around the time that a watch factory was created by financier John Law and Henry Sully at Versailles, and the Duke of Orleans (who was the regent of France until Louis XV came of age) wanted to challenge the English, who at the time were flaunting their superiority to the French in watchmaking. Gaudron told LeRoy that price was no object and asked Pierre-François to build the best watch that he was capable of. The completed watch was purchased by the Regent, who was extremely satisfied with it, and it evidently aptly served its purpose in standing up to the English.

These stories, 20 years apart, clearly demonstrate that Pierre-François LeRoy was an outstanding craftsman and maker of watches and that his reputation was well known in that regard, both in and out of Paris and also across the Channel in England.

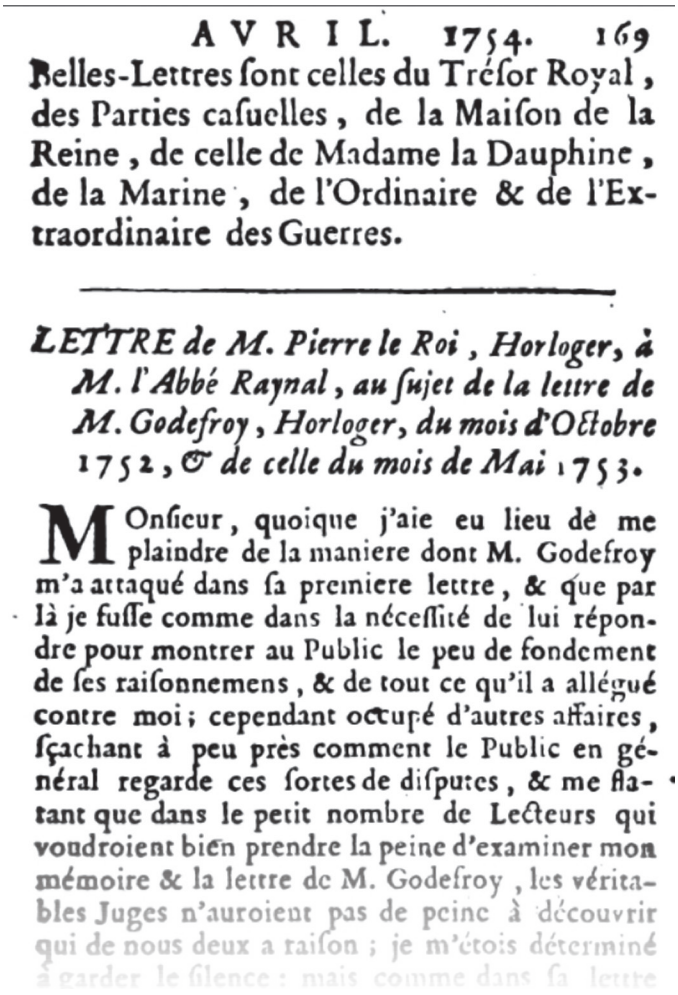
Horological Dispute in the Press

An interesting written exchange occurred between 1752 and 1754 in the *Mercure de France*, involving Pierre-François and a lesser-known Parisian *horloger* named Godefroy (who had apparently briefly held the title of *horloger* to the Duke of Orleans). It all started with the publication in June 1752 of a letter that LeRoy had sent earlier to someone in the Bordeaux Science Academy about a watch that Pierre-François had presented to the *Académie royale des sciences* on August 18, 1751. In that letter, LeRoy expressed his displeasure at the current trend for thinner watches (which were becoming popular with customers since the watches were not as bulky to wear). As Pierre-François convincingly explained, the design considerations that went into a flatter watch, most notably the reduction in the diameter of the important crown/escape wheel, invariably resulted in a watch that was less able to run well and reliably over a long period of time. In a way, LeRoy revealed himself as somewhat of a traditionalist (in this case favoring the older verge escapement design) and suspicious about the ability to produce reliable and well-constructed thin watches.

In the letter, Pierre-François also commented on the cylinder escapement (an English invention attributed to Graham), which was used by some *horlogers* to make even thinner watches. He and his brother Julien had studied Graham's cylinder watches many years before, and Pierre-François argued that the cylinder was a weak solution because of its increased need for lubrication. He added that it was also more difficult to manufacture properly, resulting in more expensive watches compared to the traditional verge design (which he seemed to favor anyway). It appears that both Pierre-François and his nephew Pierre LeRoy did not like the cylinder escapement, and some have suggested that part of the reason may have been patriotic, that is, to not see an English invention dominate the watch market in France. Godefroy, who claimed to have built watches with the cylinder escapement for 25 years with great success, was incensed. In a response published in the fall of 1752, he accused LeRoy of being ignorant of the cylinder escapement design and making false statements about it. He boldly challenged Pierre-François to a contest in which each would make a watch of his own design and let an impartial jury decide which was the better one. No doubt, Godefroy saw his livelihood compromised by Pierre-François's letter and felt the need to defend his approach, even if he did so in a rather cavalier and somewhat disrespectful manner.

In March 1753, a response was published to Godefroy's letter, written by Pierre-François's nephew, Julien Sénard, in which he defended his uncle and argued the technical merits of the verge watch (as commented upon by LeRoy) versus the cylinder watch. Godefroy again picked up the pen and responded in May to Sénard, suggesting that LeRoy did not have the courage to defend himself and was letting his nephew do it for him. He reiterated his arguments, suggested that there was nothing new in what LeRoy was suggesting as far as improvements to the old verge design, and again challenged him to a showdown "file in hand" to determine who of the two could make the better watch. To further insult the well-respected LeRoy, he also suggested that 60-year-old English verge watches (by Tompion and the like) were better than similar ones built in France at the present time.

In April 1754, Pierre-François broke his silence and wrote to the *Mercure* to tactfully but forcefully defend his point of view against Godefroy's (Figure 10). He said that he had remained quiet in front of Godefroy's attacks, being otherwise occupied and also of failing health, but he now felt the need to set the record straight about his own design for an improved watch and to dispel some of Godefroy's misinformation and faulty reasoning. LeRoy also attached testimonies by several respected Parisian *horlogers*, including *garde-visiteurs* of the Community of master-*horlogers* of Paris, attesting that LeRoy's new verge design was indeed novel and not previously seen. Regarding Godefroy's proposed competition, Pierre-François indicated a bit sarcastically that he didn't feel that the English would agree to have Godefroy be their champion



AVRIL. 1754. 169

Belles-Lettres ſont celles du Tréſor Royal, des Parties caſuelles, de la Maiſon de la Reine, de celle de Madame la Dauphine, de la Marine, de l'Ordinaire & de l'Extraordinaire des Guerres.

LETTRE de M. Pierre le Roi, Horloger, à M. l'Abbé Raynal, au ſujet de la lettre de M. Godefroy, Horloger, du mois d'Octobre 1752, & de celle du mois de Mai 1753.

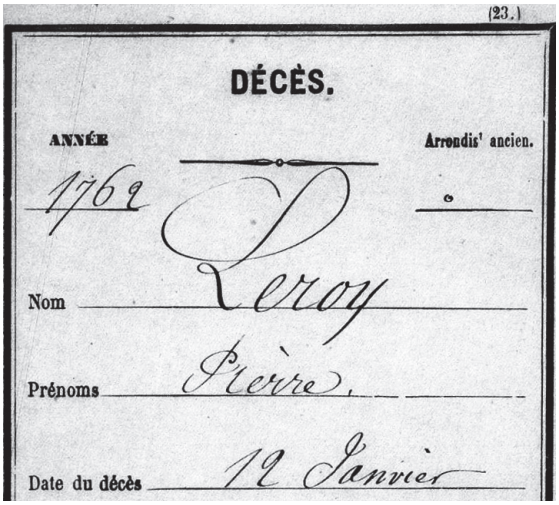
MOnſieur, quoique j'aie eu lieu de me plaindre de la maniere dont M. Godefroy m'a attaqué dans ſa premiere lettre, & que par là je fuſſe comme dans la néceſſité de lui répondre pour montrer au Public le peu de fondement de ſes raiſonnemens, & de tout ce qu'il a allégué contre moi; cependant occupé d'autres affaires, ſçachant à peu près comment le Public en général regarde ces ſortes de diſputes, & me flatant que dans le petit nombre de Lecteurs qui voudroient bien prendre la peine d'examiner mon mémoire & la lettre de M. Godefroy, les véritables Juges n'auroient pas de peine à découvrir qui de nous deux a raiſon; je m'étois déterminé à garder le ſilence: mais comme dans ſa lettre

Figure 10. Start of Pierre-François LeRoy's final response to Godefroy, published in the *Mercure de France* (April 1754). This is the last written work by him. PUBLIC DOMAIN.

of the English cylinder escapement against LeRoy. LeRoy also stated that his objective, in coming up with his new verge watch design, was that such a watch would not only work reliably for six months to a year, but also for seven or eight years. He claimed to have succeeded in this regard, for preference to French watches was now observed in French provinces and other countries.

Undaunted, Godefroy came back with a new letter in July 1754, but this time LeRoy remained silent. He had very ably and convincingly defended his points of view and further explained his new watch design in his letter of April 1754, and there was really nothing left for him to add. Even though Godefroy had made some valid arguments in defense of the cylinder escapement, it is clear in reading the exchanges that Pierre-François was an articulate, very knowledgeable, and respectful man of great watchmaking experience who ably defended the ideas and notions he believed in so deeply.

The final letter by Pierre-François LeRoy, featured in the April 1754 edition of *Mercure,* is the last historical record



(23.)

DÉCÈS.

ANNÉE 1762 — Arrondis^t ancien. 0

Nom Leroy

Prénoms Pierre.

Date du décès 12 Janvier

Figure 11. Death record for Pierre (François) LeRoy from Paris records, January 12, 1762. PUBLIC DOMAIN.

one can find of anything written by him. The breadth of the horological subjects and opinions he expressed in it serves as a sort of testament to his life's work in watchmaking.

The End of the Family Line

Some have suggested that Julien LeRoy had long suffered from delicate health. He appears to have managed his shop until the end of his life, with the help of his son Pierre, and died on September 20, 1759, at the age of 73. A large number of people are believed to have accompanied the funeral procession to his final resting place, which is a testament to his reputation, the love of his workers, and the respect of other *horlogers* who had benefitted from Julien's numerous inventions, which he had shared freely to promote the growth of French horology.

True to his nature, Pierre-François slipped away unnoticed by history less than three years after Julien, on January 12, 1762, and was buried at *St-André des Arts* (Figure 11). In a letter that he wrote to the *Mercure de France* eight years before, he mentioned he had been sick, so he may have suffered from ill health like his brother. His bones, like those of his brother Julien, are quite possibly now among the thousands stacked in the Paris Catacombs, created after closures of major older Paris cemeteries, which started in 1780. His proudly made and signed creations, like those of his brother and nephew, provide a lasting testament to his life's work.

Pierre-François was undoubtedly driven by pride in his work. He desired to constantly improve the quality and reliability of his timepieces (even if it meant going against some of the trends prevalent at the time) and tried to get the very best out of more traditional designs. In that sense, it could be said he was conservative in his approach and strongly connected to the fine traditions of the French horological past. Yet he also demonstrated

a keen mind striving for novel ways to build clocks and tell time as accurately as possible, in an age when timekeeping was of great interest to scientists.

Julien's son Pierre LeRoy's horological career produced numerous achievements, but he later became frustrated at not being properly recognized and rewarded for his long, dedicated work on marine chronometers (as was his principal French competitor, the Swiss immigrant Ferdinand Berthoud).[30] Pierre retired in 1773 to his lovely country house in a village called Visy-sur-Orge about 12 miles (20 kilometers) south of Paris (Figure 12). He died there on August 25, 1785, at the age of 67, and was buried in the cemetery of that parish. Some clocks, not all made by his father or himself, are listed in the inventory of his affairs. It appears they were stuffed in a cabinet and were no longer in working condition.

The last document from Pierre LeRoy's hand is a letter dated 1785, in which he describes some research he had been doing on "nature, the properties and propagation of light, the cause for rotation of planets, the length of the day and the year."[31] Clearly, Pierre's bright and inquisitive mind was still pondering many aspects of time. Roger Lallier says this about the last writings of Pierre LeRoy: "It's the work of a great mind, curious, multi-faceted, independent, and in essence a great precursor. . . . In [his] manuscripts, what strikes the reader is the conscience, loyalty, assurance and modesty of its author. The absence of any petty ambition, judged after two centuries, is particularly striking."[32]

With Pierre LeRoy's passing, this venerable branch of the LeRoy horological tree came to an end. None of the numerous future French *horlogers* named LeRoy came from this exceptional lineage.

Appendix I: Historical Information Sources

Many of the contemporary documents used in researching this article have been digitized during the last several years and can be accessed using the Internet on sites including Google Books and Gallica (the digital library of the *Bibliothèque nationale de France* and its partners, where millions of documents are now available to the public). Several French horology books are freely available, dating from the 18th and 19th centuries, and discuss some of the horological developments in France during the period covered by this article.

Because horological devices and inventions were often presented and discussed by the *Académie Royale des Sciences*, relevant information in this area can be obtained from the Academy's publications, which include *Journal des scavans* [*savants*]; *Journal de Trévoux*; *Histoire de l'Académie royale des sciences*; *Machines et Inventions approuvées par l'Académie*; etc.

Other excellent sources of information are articles contained in the *Mercure de France*, a monthly gazette and literary magazine first published in the 17th century. The gazette was published from 1672 to 1724 (with an interruption in 1674–77) under the title *Mercure*

Figure 12. Pierre LeRoy's house in Visy-sur-Orge, photographed by Paul Ditisheim around 1940. PUBLIC DOMAIN.

galant (sometimes spelled *Mercure gallant*) in 1672–74 and *Nouveau Mercure galant* in 1677–1724. The title was changed to *Mercure de France* in 1724.

Another source of useful information is the *Minutier Central* in Paris, created in 1928 to incorporate all the documents (around 100 million acts) of Parisian notaries from the late 15th to early 20th centuries. These include marriages, apprenticeship contracts, inventories after deaths, business transactions, leases, loans, etc. Some of these documents have been digitized but the vast majority need to be accessed onsite, guided by the online index and search tools to determine which documents exist in which notary's study pertaining to a particular individual.

Finally, online genealogy sites such as GeneaNet offer very useful family trees of *horlogers* of interest. The LeRoy family tree, as researched and documented by user "dgardner," was particularly helpful in developing this article.

It should be noted that searching online for "Pierre LeRoy" yields mostly documents pertaining to Julien LeRoy's son Pierre, as actual references to Julien's brother "Pierre" (François) are not plentiful. Further complicating matters is that both Pierre-François and his nephew Pierre were *horlogers* whose working lives overlapped by 20-odd years. This means that some of the writings and inventions of the former have often been ascribed erroneously to the latter, so careful reading and understanding of the sources is required to properly attribute some of the facts from those 20 years.

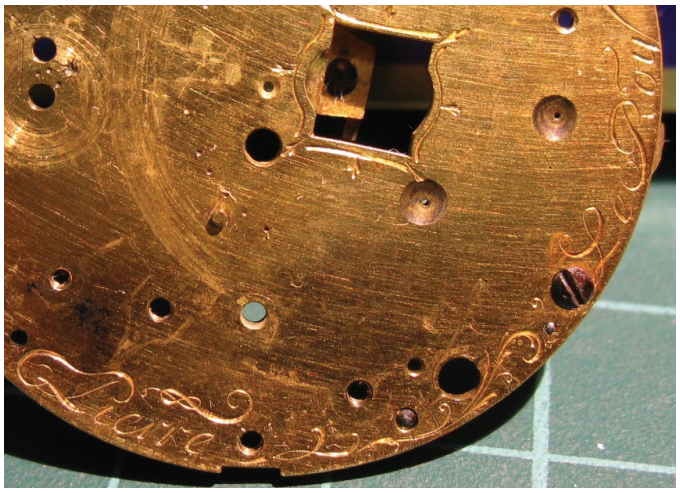
Appendix II: Pierre-François LeRoy Watch Movement, Number 687

Included here are a few photos of a watch movement signed "Pierre Le Roy A Paris", produced by Pierre-François's workshop around 1730. It is one of the rare watches that have survived from this LeRoy, and is numbered "687." It is a verge-fusee watch movement, missing the case, dial, and hands. Also missing is most of the repeater mechanism that it originally had.

Many watches of that era suffered similar fates to this one: because of wars, economic hard times, neglect, ignorance, disinterest, changing tastes, and so on, the movements were often separated from their valuable gold cases (which were sold for gold value). Usually the movements were just thrown out, deemed worthless. Some, like this one, somehow survived, discarded in dusty boxes or forgotten in the drawers of old desks. They serve to remind us of the excellence and beauty of watchmaking in Paris during the 18th century.

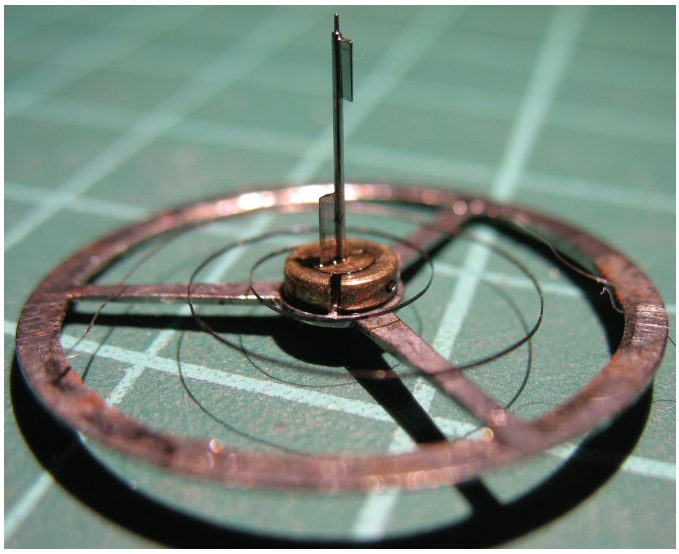
This movement would likely have been in an expensive watch in a gold case produced for one of LeRoy's affluent customers. This humble, incomplete movement has provided the author with the opportunity to research the life, times, and work of its maker, and document some aspects of his life in a way that had not been done before.

▲ **Figure 13.** A close-up view of the balance-cock (early Louis XV style) of the watch movement no. 687 by Pierre-François LeRoy, ca. 1730. As found, the steel cockerel needs cleaning. AUTHOR'S COLLECTION.

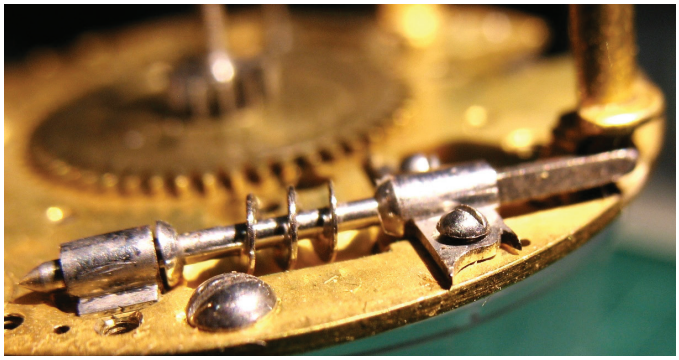


▲ **Figure 14.** LeRoy watch no. 687, exposed view of top plate showing signature. AUTHOR'S COLLECTION.

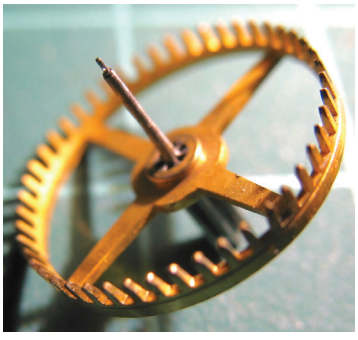
▲ **Figure 15.** LeRoy watch no. 687, detailed view of potence (left), counter-potence (right), and crown/escape wheel, showing quality of construction and finish. AUTHOR'S COLLECTION.



▲ **Figure 16.** LeRoy watch no. 687, detailed view of balance wheel, hairspring, and verge (with highly polished pallets). AUTHOR'S COLLECTION.

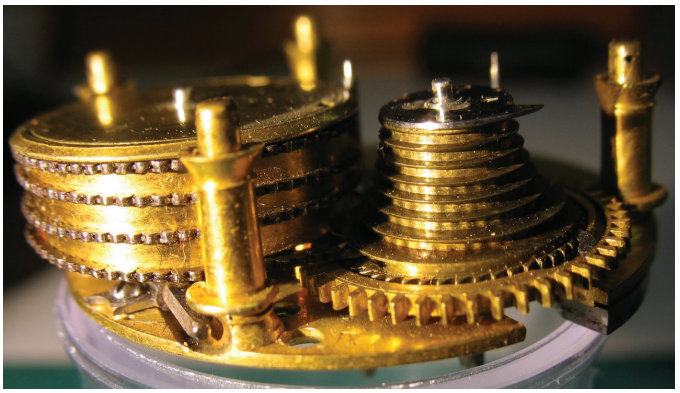


▲ **Figure 19.** LeRoy watch no. 687, detailed view of exquisitely made steel worm-gear (tangent screw) mechanism used to pre-load the mainspring barrel. AUTHOR'S COLLECTION.



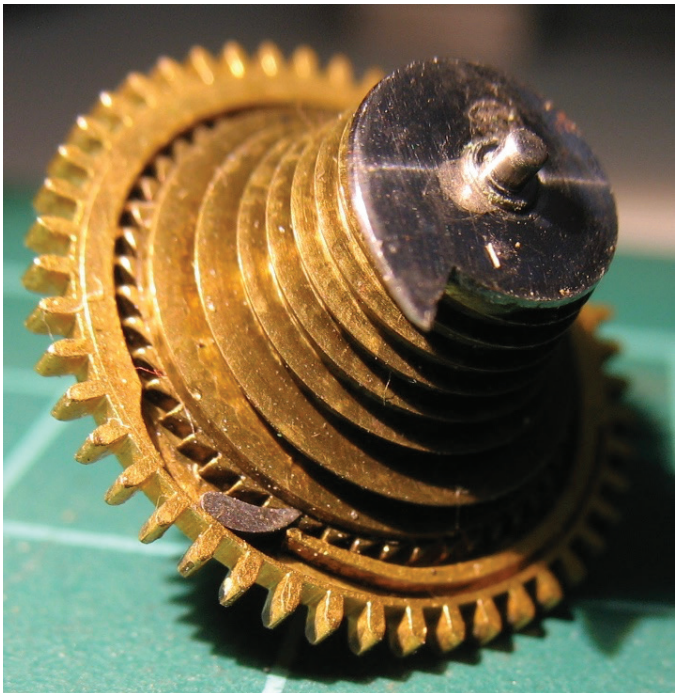
▲ **Figure 20.** LeRoy watch no. 687, detailed view of contrate wheel with 48 teeth, which engage with the pinion of the crown/escape wheel. AUTHOR'S COLLECTION.

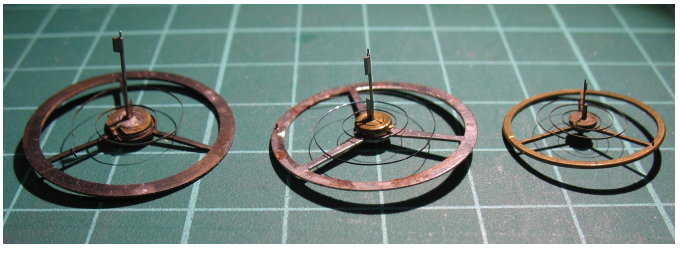
▲ **Figure 21.** LeRoy watch no. 687, detailed view of crown/escape wheel with 15 teeth, which engage with the two pallets on the verge staff. AUTHOR'S COLLECTION.



▲ **Figure 17.** LeRoy watch no. 687, view of mainspring barrel, chain, and fusee, with top plate removed. AUTHOR'S COLLECTION.

▼ **Figure 18.** LeRoy watch no. 687, detailed view of fusee assembly. AUTHOR'S COLLECTION.





▲ **Figure 22.** LeRoy watch no. 687, comparative view of size of three balance wheels and verges (*left* Edward East ca. 1685, *center* Pierre LeRoy ca. 1730, *right* Jean-Antoine Lépine ca. 1770). This illustrates Pierre-François LeRoy's preference for a longer verge staff (thicker watch), and larger crown/escape wheel, rather than verge-fusee watches that followed (thinner watches). AUTHOR'S COLLECTION.

Appendix III: Pierre-François LeRoy's Publications

Date	*Organization or Publication*	*Description*
1728	*Académie des sciences*	Clock with quarters and "all or nothing" (repeating function) Clock chiming "true time" (solar time)
1732	*Société des arts*	Means to make clocks with moving dials chime "true time"
1733	*Mercure de France*	Description of a spring-driven clock marking and chiming "true time"
1741	*Académie des sciences*	New watch escapements (with frictional rest)
1744	*Mercure de France*	Changes to a repeating watch for greater and more lasting accuracy
1751	*Académie des sciences*	Means to remediate main faults of flat or semi-flat watches
1752	*Mercure de France*	Letter explaining problems with flat watches and cylinder escapement, and means to make better verge watches
1754	*Mercure de France*	Response to Godefroy's criticism of 1752 letter

Appendix IV: Timeline and Locations of People of Interest in the LeRoy Family

Year	*Which LeRoy*	*Location*	*Source*
1703	Julien	Moves to Paris	Various
1719	Pierre-François	Still residing in Tours	*Mercure de France*
1721	Pierre-François	Paris (becomes master *horloger*)	La pendulerie
1722	Pierre-François	Cour de Lamoignon	Minutier Central
172?	Julien	Rue des Petits Augustins	Sully, p. 385
1730	Pierre	Place Dauphine	Minutier Central
1733	Pierre-François	Place Dauphine	*Mercure de France*
1739	Julien	Galeries du Louvre (*horloger du roi*)	*Dictionnaire artistes*
1741	Pierre	Place Dauphine	Minutier Central
1746	Julien	Rue du Harlay	Minutier Central
1747	Pierre	Place Dauphine	Minutier Central
1751	Pierre	Rue Saint André des Arts	*Mercure de France*
1757	Pierre-François	Moves to Rue Dauphine	La pendulerie
1762	Pierre-François	Moves to Rue de Hurepoix	La pendulerie
1765–1779	Louis David Carré	Rue Dauphine, Hotel de Mony, Mouy, Mouhy	Minutier Central
1785	Pierre	Visy sur Orge (12 mi [20 km] south of Paris)	Burial document

Notes

1. The name "LeRoy" is spelled differently in historical documents (Le Roy, Le Roi, Leroy, Leroi, LeRoy), and engraved differently on timepieces from makers of this name. For this article, the form "LeRoy" has been used. Also, to minimize confusion about three "Pierre" LeRoys in the same family (the grandfather, the brother, and the son), some authors have referred to them as Pierre I, Pierre II, and Pierre III. In this article, the grandfather is named "Pierre-Julien," the son "Pierre-François," and the grandson "Pierre."

2. Watches with the name "Leroy" are still manufactured and sold today. Until 1989, when it was finally surpassed by Patek Philippe, the honor of the "most complicated" watch was held by the "Leroy 01," manufactured in the Besançon region of France in 1900 by the House of Leroy, whose origins date back to a Charles Leroy in Paris in 1785.

3. In Adolphe Chapiro's definitive book on the history of French watchmaking (*La Montre Française, Éditions de l'amateur, 1991*), six pages of text and countless photographs are devoted to Julien, whereas only three paragraphs and a few photos of one watch are devoted to Pierre-François. In most other historical books on horology, contemporary or later, Pierre-François is barely mentioned.

4. Giuseppe Brusa was a famous Milanese horological historian. Charles Allix was a distinguished English antiquarian horologist and seller of horological books and antique clocks and watches. From 1968 to 1972, they co-authored interesting articles on the three LeRoy family members in the UK publication *Antiquarian Horology*.

5. Reasons for the 1730 date estimate include: the shape and size of the balance cock; the lack of counter-potence adjustment screws (invented by Julien LeRoy around 1735); the size of the crown/balance wheel; and the presence of a worm-gear mechanism to pre-load tension on the mainspring barrel.

6. The author published a two-part article in the July/August and September/October 2019 issues of the *Watch & Clock Bulletin* on another lesser-known Parisian *horloger* named André-Charles Caron. The reader may wish to refer to that article for a general overview about watchmaking practices in Paris during the early 18th century. See https://www.nawcc.org/publications/watch-clock-bulletins/.

7. See A. Chapiro, *La Montre française du XVIème siècle jusqu'à 1900*. Christian Huygen's introduction of the pendulum for clocks and balance spring for watches (1659 and 1675, respectively—the latter built for him by the French *horloger* Isaac Thuret) revolutionized the construction and precision of timepieces. These were some of the most sophisticated mechanical devices produced at the time and were of great interest and appeal to learned men of science and to affluent buyers.

8. Tours is an ancient French city on the Loire River, about 149 miles (240 kilometers) southwest of Paris. It was the royal seat of power from 1450 to 1550. It's also from the vicinity of Tours that the legendary *La Pucelle* (Joan of Arc) launched her campaign against the English in 1429. The LeRoys had originated in Paris, but an ancestor named David, who made sundials, moved to Tours in 1587, where he married Rebecca Rouer, daughter of a *maître horloger*. Notarized acts from 1596, 1602, and 1610 describe him as "*maître horlogeur du roi*" ("master watch/clockmaker to the King").

9. Some years later, when he was installed and respected as one of the great *horlogers* in Paris, Julien LeRoy developed a very influential, new horizontal design for tower/institutional clocks. His experience with his father in Tours would likely have played a part in his work in this area.

10. The *Place Dauphine*, built between 1608 and 1613 on the northwest end of *l'Ile de la Cité* in Paris, housed numerous famous families of *horlogers* during the 17th and 18th centuries (e.g., Martinot, LeNoir, Baillon, Joly, Gudin, LeRoy, Berthoud, Romilly, Lépine, Breguet). The nearby *Quai des Orfèvres* housed most of the great jewellers in Paris at the time, which facilitated the exchange of work between the two professions, necessary for the production of luxurious timepieces during that time.

11. Firstborn children typically benefit from their parents' full excitement and anticipation of having a child and receive full-time attention. In the author's experience, they often grow up to become strong, confident people with leadership qualities. As an example, the majority of U.S. presidents were either the firstborn child or firstborn son. Likewise, all but two of the first astronauts who went into space were firstborn (see https://history.nasa.gov/SP-350/ch-8-5.html).

12. Practitioners of the art of horology were often referred to as *artistes* at the time, to differentiate the accomplished artisans from the *ouvriers* (workers) who merely carried out the work on the various parts and components of timepieces, under the direction of the *maître-horloger* (master clock-watchmaker).

13. In "*Etrennes chronométriques*, Paris 1811," Antide Janvier wrote: "For those who appreciate masterpieces of all times, it is not useless to remind the public that, since a quarter of a century – ie. 1786 – Julien LeRoy does not have a descendant of

his name, still practicing horology." Even though the direct lineage of *horlogers* in this particular LeRoy family ends with Julien's first son Pierre, the traditions were also transferred to other *horlogers* by marriage. The numerous other "LeRoy" watchmakers and clockmakers who came later are from much different branches of the family tree.

14. Louis-David Carré was the son of Elizabeth de la Fond, the sister of Julien LeRoy's wife, Jeanne. He was apprenticed to Julien at a relatively late age, and later married Pierre-François's daughter Thérèze. Some time later, he and Pierre-François became business partners, and some watches from the period bear both their signatures. Carré was appointed *garde-visiteur* of the community in 1768–70 and 1775. He became wealthy and purchased a hotel on rue Dauphine for 100,000 livres.

15. See Saurin, *Remarques sur les horloges à pendules*.

16. See St-Louis, "André-Charles Caron—A Watch Maker's Shop (*boutique d'horloger*) on rue Saint-Denis, Paris, Circa 1750, Parts 1 and 2."

17. See Wilson et al., *European Clocks in the J. Paul Getty Museum*.

18. The decision by Louis XIV to revoke the Edict of Nantes in 1685 greatly affected the progress and capabilities of French watch/clockmaking, because many *horlogers* were Protestant, and either could no longer legally practice their trade, or were compelled (along with many of their workers) to seek employment in other countries, notably England, Germany, and the Jura region of Switzerland. Almost overnight, the previously highly regarded French horological community fell into decline.

19. In his fine horological book (*Traité d'horlogerie*, 1757), Lepaute wrote of Julien: "Mr. Le Roy does not possess jealousy unfitting of a gentleman, and has only sought to allow all *horlogers* to see his works, learn from his ideas, and to contribute their own."

20. Another view, expressed in G. Wilson's *European Clocks in the J. Paul Getty Museum*, indicates that Julien LeRoy's estate after his death was worth 200,000 livres, which was a quite sizable sum. Wilson also states that there was great disparity between the different Parisian *horlogers* in the 18th century, and that this depended more on their business than technical skills. Julien LeRoy was definitely successful as a maker and seller of timepieces of various types (watches, ornamental clocks, institutional clocks); for example, Wilson estimates that his firm sold more than 3,500 watches over the years.

21. Julien LeRoy was apparently quite disturbed by the fact that Genevan watch shops often engraved his name on second-rate movements, to fool unsuspecting buyers abroad. This was a common practice in 18th-century watchmaking, to profit from well-known Parisian maker names (LeRoy, Romilly, Lépine, Breguet, etc.). When Julien's son took over the business after his father's death, he continued to sign the watches with his father's name, but also had the initials "J L R" engraved into the filigree of the balance cock, to help differentiate a "real" Julien LeRoy watch from one of its cheap and fraudulent Swiss imitators.

22. Gould, *The Marine Chronometer*, 90–91.

23. In the *Revue Chronométrique* of 1862 (p. 416), Claudius Saunier wrote: "For having found longitude using an ingeniously crafted mechanism, but abandoned as soon as it was born, Harrison received 500,000 French francs, and ships were put at his disposal for testing his timepieces. As to the French man of genius [Pierre LeRoy], who sacrificed 20 years of his life, and his personal fortune, to bring to his country yet another glory, his reward consisted of a thin medal. And if this desultory reward wasn't insulting enough, almost a century after the death of this great artist, a few men of passion and scientific probity must still fight to extract his memory from the darkness where some have tried to bury him."

24. Lavernarde, *Moniteur de l'horlogerie*.

25. A *garde-visiteur* played an important role in the community of watch/clockmakers in Paris. Voted to the role by his peers, he was empowered to inspect the shops of the members at any time to detect improprieties, including timepieces that had been improperly made or of low quality, or cases that had been made without the minimum acceptable content of silver or gold. He had the authority to request being accompanied by a police officer and start legal proceedings against *horlogers* found to be in the wrong.

26. "Henry Sully is a figure that stirs the imagination," wrote Paul Chamberlain. Sully was an Englishman (possible descendant of French Protestant ancestors, but converted to Catholicism in Paris before he died) who had been apprenticed to the famous clockmaker Charles Gretton in London. He later met Isaac Newton and Christopher Wren who encouraged his ambition to one day create a timepiece that could determine longitude at sea. He travelled and studied in Holland, then Austria, before settling in France, where he had rich, influential patrons. He was introduced to Julien LeRoy by William Blakey, and the two became good friends. Sully was encouraged by Scottish financier John Law (then French Controller General of Finances) to establish short-lived watch

factories at Versailles then at St. Germain. Both depended on English-trained workmen who were enticed by Sully to come to France for good wages and working conditions. In 1717, the year before the *Société des arts* was created, Sully published one of the landmark books of horology in French: *Règle artificielle du temps*. This book was updated and lovingly edited by Julien LeRoy in 1737. In the new edition, Julien included biographical highlights of his friend Sully, who had passed away in 1728, a relatively poor man.

27. It has been suggested (see Maury) that the dissolution of the *Société* was in part brought upon by the *Académie* putting pressure on some of its members, including founding member Pierre-François LeRoy, to agree to only present and publish their findings within the confines of the more established *Académie*. If this is true, one can wonder if this may have been a source of disagreement between the two brothers LeRoy. Julien (who was even president of the *Société* for some time) continued to be an active member of the *Société* until its final dissolution, which more or less coincided with his new edition of Sully's book in 1737, where the *Société* was named on its cover page.

28. A Pierre LeRoy clock also had such a notation: https://www.richardreddingantiques.com/sold/categories/29/9572/.

29. Blakey, "Mr. Blakey's Comparisons on the French and English Arts," 403.

30. During the many years of the development of marine chronometer clocks in France, Pierre LeRoy's main competitor was Swiss-born Ferdinand Berthoud (1727–1807). It was said that Berthoud was a better craftsman than LeRoy, and his timepieces demonstrate closer attention to fine detail and finish. However, it was also said that Berthoud was more of an experimenter, trying out all kinds of designs, whereas LeRoy would think a long time about a solution before actually building it. Undoubtedly, Berthoud benefitted from LeRoy's design solutions in perfecting his own chronometers. He was also much better at promoting himself and ingratiating himself to the king's entourage. Pierre LeRoy, who was later recognized as having produced the first true chronometer (see Gould), on whose design elements all the ones that came afterward were to rely, did not receive nearly the same rewards and adulation as did the more popular Berthoud (who also wrote horological books that praised his own accomplishments). This is one of the reasons why LeRoy chose to retire from the profession and spend his last years in relative isolation at his country residence.

31. See Ditisheim, *Pierre Le Roy et la chronométrie,* 36.

32. Ditisheim, *Pierre Le Roy et la chronométrie,* 36.

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About the Author

Robert St-Louis developed an interest in horology some years ago, after his retirement from a long career in public service. In his quest for knowledge, he has acquired much information from books, internet sources (such as NAWCC discussion forums), and back issues of horological publications (such as the *Watch & Clock Bulletin*). He has also acquired some old tools, as well as specimens of vintage clocks and watches, and is trying to learn some repair and restoration skills. His interests have gradually coalesced on Parisian watchmakers from the 18th century. He enjoys researching and writing on this subject and sharing some of his knowledge with other enthusiasts. Robert is an active participant in NAWCC Chapter 111 in Ottawa, and can be reached at RSTL9999@gmail.com, or at his horological website https://timetales.ca.