"The Carriage Way"

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A Berthoud Chronometer Carriage Clock

President's Report

Stan Boyatzis

Welcome to our first newsletter for 2017. I hope you all had an enjoyable and relaxing break over the Christmas period.
Membership of Chapter 195 now stands at 189 and the executive continues to work hard to promote the chapter. I encourage current members to spread the word about Chapter 195 and invite friends with an interest in carriage clocks to join. Remember, this is your newsletter so if you have any helpful hints or unusual carriage clocks you own or have seen please share these with the membership. If you have any queries about a carriage clock please do not hesitate to contact Doug or Ken. Details are at the back of the newsletter.
This month's feature article is on "A Berthoud Chronometer Carriage Clock by Ronald K Reed (USA) and Tom Wotruba (USA) originally published in the NAWCC Bulletin in October 1999. Ron passed away in 2001 and Tom has revamped the article now using colored photos to update the article.
Andrew Bliss (Aust.) has written a short article on setting up the strike mechanism on a Dent petite sonnerie and how this differs from a conventional petite sonnerie.
Ken Hogwood has researched and discusses a recent carriage clock donation to the NAWCC Museum. The clock was retailed by "J. E. Caldwell & Co., Philadelphia".
Remember copies of previous newsletters, hints and a question page are included on our website. There are also carriage clock articles from the Bulletin and carriage clock videos from the NAWCC library. You will need to be logged in as a NAWCC member to access these.

http://community.nawcc.org/Chapter195/Home/

A link to the Online Galleries website is again included. This is a useful websites to research retail prices of carriage clocks and what is currently for sale. The website is updated weekly. We are happy to include other websites that may be of interest to the membership. The Executive Committee hopes you enjoy reading the Newsletter.

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A BERTHOUD CHRONOMETER CARRIAGE CLOCK

Ronald K Reed (USA) and Tom Wotruba (USA)

It's always a pleasure to work on a well-designed and constructed clock. When the clock is also beautifully finished and has a bit of historical significance to it, or its maker is important, that only makes working on it much more interesting. But before I get into the mechanisms and repair experiences I had, a little background on the clock itself should add interest and perspective to this story.

The clock in question is a Berthoud (Figure 1). The best guess is that it was made circa 1870 by Auguste-Louis Berthoud, a descendent of the celebrated Ferdinand Berthoud who died in 1807.

In his book *Carriage Clocks,* Charles Allix pictures a nearly identical clock (Plate V/12 in his book) and writes that it is a matter for speculation which member of the Berthoud family made it.

But because of its style of movement, escapement, case, and handle, Allix dates the clock "near the end" of the nineteenth century and notes in the same paragraph that Auguste-Louis Berthoud's name appears on a chronometer numbered 47 that was made in the second half of the nineteenth century.

Tony Mercer, in his book *Chronometer Makers of the World,* lists Auguste-Louis Berthoud as living from 1828 to 1910 and making 150 chronometers in 27 years.

Thus, it seems most likely that Auguste-Louis was the Berthoud who made this clock.

Further discussion and correspondence with experts on carriage clocks produced some interesting information and opinions that pointed toward the possibility that another, lesser known, French clockmaker by the name of Edouard Francois was its maker. In Carriage and Other Traveling Clocks by Derek Roberts, Figures 13-17a and b, there is a movement very similar to the subject movement, except that the movement depicted is equipped with a spiral wire gong whereas the subject movement has a bell and a platform escapement bridge that is quite different from the one on the pictured clock. Roberts indicates that the clock in his book is an Edouard Francois No. 1 Chronometre Brevete S.G.D.G. Its remontoire spring barrel and other parts of the movement are identical to the subject clock movement, however, Roberts also refers to a similar clock illustrated in Joseph Fanelli's A Century of Fine Carriage Clocks, number 64.

Figure 1. A Berthoud chronometer carriage clock, attributed to Auguste-Louis Berthoud.

It shows a similar but unnumbered clock signed Ed. Francois on the dial with a stamping on the backplate that reads BTE S.G.D.G./E.F./PARIS, which may refer to his patent on this version of the remontoire escapement. Another clock carrying the name Edouard Francois and numbered #24 was pictured in Roberts' book The Art & Craft of Clockmaker III. The layout of his dials is the same as in the subject clock and the one reported by Fanelli. And, like the Fanelli movements, the #24 is also equipped with a spiral wire gong and similar stamping on the backplate. It has a chronometer escapement and exterior parts, except for a lifting lever, identical to and positioned like those of the subject clock movement. This depiction in Roberts' book included a close-up photo of the platform escapement and a diagram of the remontoire system, from the going barrel up to and including the remontoire spring barrel. I have borrowed from that diagram and modified it to illustrate the remontoire system of the subject movement, as shown later. One curious difference, among several small differences, between the subject movement and those carrying Francois' stamp, is that the Francois movements are reported to have polished steel pillars while the subject movement and at least one other marked Berthoud have brass pillars. The significance of this difference is not clear. Another Francois clock has also emerged, being pictured in Derek Roberts' website in early 1999, though it appears to be identical to the one pictured earlier in Fanelli's book and is similarly numbered. In my correspondence with both Mr. Fanelli and Mr. Roberts, two different opinions emerged as to the relationship between Francois and Berthoud. One believed that the clocks signed Berthoud were actually made by Francois and the other believed they were not made by Francois for Berthoud.

This chronometer carriage clock is quite large for a carriage clock, measuring 12 inches tall with the handle up and nearly 7 inches wide at the base. It differs from the clock pictured in Allix' book in two ways. One, the Corniche case in Allix is not engine-turned, and two, the description by Allix does not mention a remontoire. A similar clock attributed to Berthoud is also pictured in Derek Roberts ' book Carriage and Other Travelling Clocks (Figures 13-16), which is described as having a remontoire as well as moon phases incorporated into the seconds dial, grande sonnerie striking, and a more elaborate case with columns and bun feet. Yet another similar clock is shown in Roy Ehrhardt's Foreign Clocks, Book 5 (page 58) from a catalogue of Astor Galleries with features similar to that in Roberts' book but with a mahogany case. Ehrhardt's Book 3 pictures a clock taken from a Sotheby's 1984 auction catalogue that is described and pictured to be the same as the subject clock. Christie's auctions have likewise included a number of similar clocks signed Berthoud. In 1992 their London auction included one that was quarter-striking on two gongs (lot 25), and their 1998 Kensington auction included lot 64 which was similar in appearance to the subject clock except that its striking utilized a coiled gong. Most recently, Sotheby's pictured a giant gilt-brass chronometer carriage clock with remontoire by Berthoud as lot 216 in its March 1999 London auction, including a leather travelling case and striking on a coiled gong.

Based on these few examples, at least , it appears that this maker identified as Berthoud made a smaller number of similar chronometer carriage clocks, but no two exactly alike. While there are no serial numbers routinely visible when this clock is assembled, the number 24 is found on both plates and some other parts when disassembled. Some hand filing marks suggests that the plates and other parts are hand finished, and the words TOOMAS NO. 2 are found engraved on the balance and the bottom of the cock. Their significance, however, is not known. Based on Fanelli's statement that Francois was working in Paris between 1880 and 1890 (information drawn from Tardy's Dictionnaire), and Mercer's statement that Auguste-Louis Berthoud lived from 1828-1910, it's a safe bet that the subject clock originated in the last twenty years of the nine-teenth century. Since both makers were contemporaries, either could have made it. But until we have further evidence, the writer will stay with Berthoud as the maker of the subject clock because his name appears on it as well as on a number of others very similar passing through reputable auction houses. This clock, which is likely the one included in the New York auction of Sotheby's in October 1984, found its way to its present owner in early 1995. Having eight or so clocks whose movements appear to be made by the same maker, then having some of them carrying one name and others carrying a different name real1y muddies the water. Hopefully, this article will bring further information or insight from readers about these clocks, their makers, and their history.

In my part-time practice of repairing and refurbishing antique clocks I have the pleasure of working on many interesting pieces, some of which greatly challenge my skills, knowledge, and experience. Because many of the clocks that I work on were originally handmade, the task of repairing them and making their complicated mechanism s function like their makers originally intended turns into quite an undertaking. But rarely does one come to me that is as delicately constructed with as complicated mechanisms as found in this clock by Berthoud. To some of these mechanisms I had no previous exposure. Then, to further complicate matters this clock had undergone the catastrophic experience of having a mainspring rupture, and the attempts of previous repairers to put right the resulting damage. The problem that its owner related to me was that the remontoire mechanism would not always stop winding when it was supposed to. And he informed me about the mainspring break and at least one other repairer's attempt to mend the damage caused by the mainspring break. I agreed to take it in for examination, but reserved the right to return it to him if I felt that the complications and/or needed repairs were beyond my abilities. The clock has three most interesting mechanisms that most clock repairer s rarely have the occasion to work on. Actually, I had never worked on a clock having any of these types of mechanisms prior to its owner entrusting me with the opportunity to repair this clock. The first of these three mechanisms is the chronometer escapement, the second is the remontoire system that provides the escapement power, and the third is its type of up-down indicator and stop work.

THE CHRONOMETER ESCAPEMENT

Because I have found no picture/drawing or other description of an escapement quite like the one in this clock, I will refer to it as being a "pivoted spring detent." It appears to be a combination of the spring detent, like that originally invented by LeRoy and later improved by Earnshaw, a form generally found in marine chronometers, and that called the "bascule" which is a form generally found in watches (Figure 2).

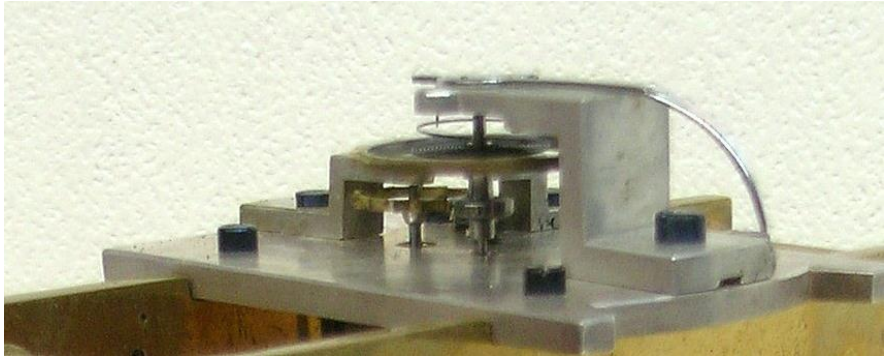
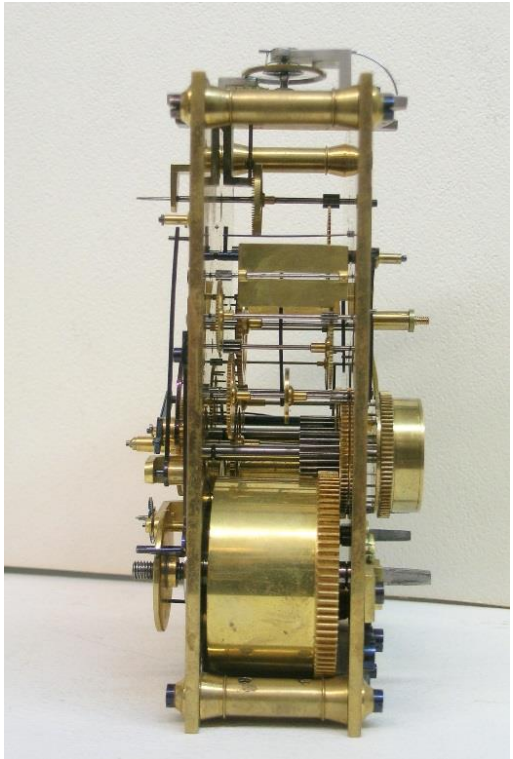


Figure 2. The escapement seems to be a combination of the spring detent and that called a "bascule," a form generally found in watches.

Instead of having a locking detent fashioned like that of Earnshaw's, the locking detent in this case has a coiled hair spring which returns the locking detent. The detent is also different in that it is shaped like an "L" with the longer arm being that portion containing the locking detent with its tiny gold unlocking spring, and the shorter arm containing a pin pallet which locks on the teeth of the escape wheel. These mechanisms each pivot under three separate bridges. One bridge secures the balance wheel, balance spring, and jewel release pallet. Another bridge secures the "L"-shaped detent with its hair spring. And the third bridge secures the tiny escape wheel. The escapement also has a one-half second beat, a bit of an oddity for a spring balance escapement, to me anyway. Of further interest in this escapement is its double over-coil balance spring. See Figures 2A and 2B for two views of the movement.



Figures 2A and 2B. Two views of the movement.

THE REMONTOIRE

The escape wheel receives a constant but controlled amount of power via an auxiliary spring (remontoire spring) which is rewound every 30 minutes by the main going spring, via the remontoire. Actually, it's my understanding that the term remontoire is an English word derived from the French word "remontoir," meaning to rewind, which is taken from "Remontoir d'egalite," a French term meaning a rewinding mechanism. The remontoire was used by many early clockmakers, especially those involved in the quest of a marine chronometer by which longitude could be determined, namely Berthoud, Burgess, Burgi, Harrison, Huygens, and Mudge. The fluctuations in power that were produced by winding springs could be nearly eliminated by the remontoire. The fusee also provided a similar remedy, and the reader will find many cases where the two systems were used in unison, as in John Harrison's marine chronometers, as well as some produced by LeRoy and Berthoud. It's also my understanding that some strike trains were equipped with the remontoire, and I assume this was to control the speed of the strike/chime.

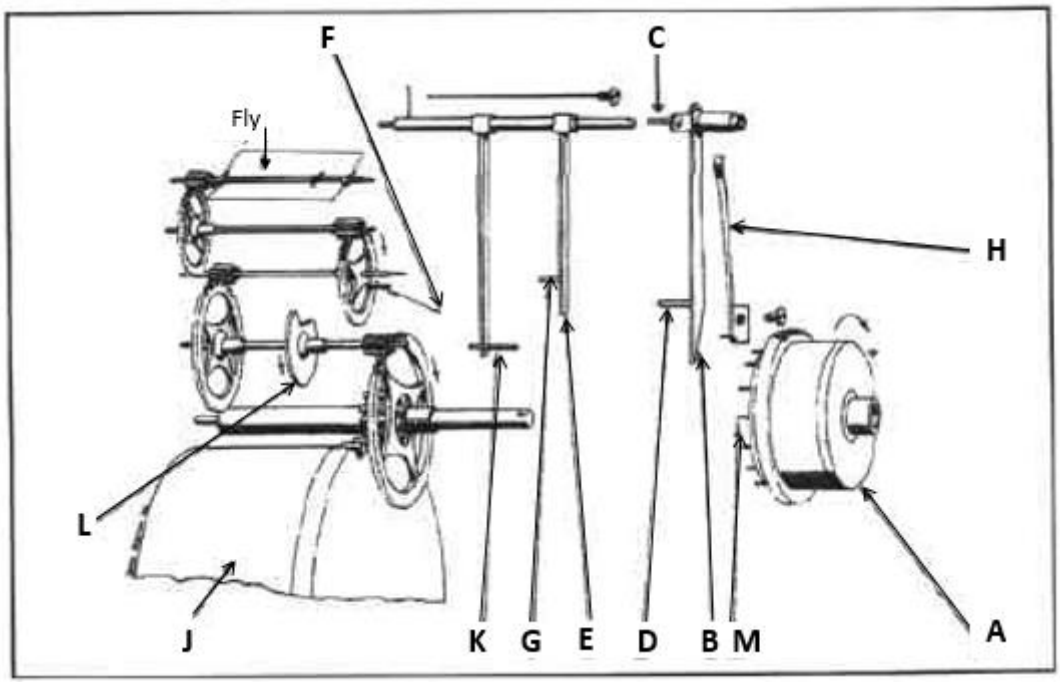


Figure 3. Diagram of the remontoire mechanism.

In transferring power from the mainspring or weight to the escapement, the main going spring, in this case, doesn't actually provide its power directly as it does in most clock movements. Instead, the mainspring only provides the power to "rewind" a much smaller auxiliary (the remontoire) spring via a system similar to that of a strike train (Figure 3). The remontoire power spring (A) is contained in a geared barrel that also has pins protruding out the back, and is wound every 30 minutes by the main going spring (J). The power from the remontoire spring is then transmitted to the escape wheel via a gear train which is not shown in the diagram. To accomplish the rewinding of the remontoire spring, a train of wheels similar in function to those of a strike train is used. The remontoire spring barrel (A) has a number of pins (M) protruding out of it. As the remontoire spring barrel rotates, releasing power to drive the escape wheel, one of its pins (M) engages lever (B), pushing it to the right. As the lever (B) is pushed to the right, the warn lever (C) is lowered to block the path of the fly, and the stop-release lever(G) is being pushed to the right to release the stop-release pin (F), and the cam lock pin (K) is being raised to clear the notch in the cam. Eventually, the pin (M) rotates far enough around to release lever (B), lever (B) gets pushed back to the left by spring (H), releasing the fly and the rest of the remontoire train. The main going barrel (J) then drives the remontoire train until the locking cam (L) has made one revolution. When the locking pin (K) drops into the notch in the locking cam, the stop-release pin (F) is captured by (G) and the motion of the train is arrested. It takes the escape wheel 30 minutes to use up enough power to allow the remontoire spring barrel (A) to rotate enough for the next rewind to occur. Therefore, the power being provided to the escape wheel is generated from the same portion of the remontoire spring, providing a constant and consistent amount of power.

THE UP-DOWN WIND INDICATOR

While many of us have worked on clocks equipped with winding stops mounted on the winding squares or gear-driven up-down wind indicators, I had never seen either in the configuration of those that are in this clock.

On many finer clocks, and on factory clocks having huge main- springs, the amount of power being released from the mainspring is somewhat regulated by winding stops. With winding stops, the power provided by the spring eliminates the large increase and decrease of power normally found when the spring is fully wound and in the last stages of the spring unwinding. On weight-driven clocks these winding stops prevent the weights from dropping too far down, or being wound up too high.

And on some clocks there are dials which indicate the amount that the spring is wound, or in the case of a weight-driven movement, the amount of drop remaining. These little mechanisms are a source of much frustration to repairers who are not familiar with their setup. All of the winding stops and wind indicators that I've had the occasion to work on have been rather basic in design and usually are made of two or four parts. Quite simple to deal with really, once one becomes familiar with them.

However, this chronometer carriage clock by Berthoud has a most unique way of dealing with these two functions. On this clock, the wind indicator is operated by a brass disc located on the arbor of the going barrel (Figure 4). The disc has two triangular-shaped steel wedges positioned on each side of it. The pointed ends of these wedges face away from the movement, and the angled faces are against the brass disc. When fully wound, the disc travels away from the movement, towards the back of the dial plate, allowing the wedges to move inward toward the center of the disc. One of the wedges has an arm leading away from it, the end of which has gear teeth cut into it. As the wedge moves, this arm is moved in or out and the geared teeth on it drive a pinion which is itself affixed to an arbor on which the indicator hand is affixed. And, as the going spring barrel winds down, the brass disc is brought back towards the movement, therein forcing the wedges further apart and rotating the dial hand counter clockwise, indicating less time remaining in the power of the mainspring.

To protect the delicate wind indicator hand, its arbor is provided a coiled hairspring so as to maintain positive contact with the geared arm from the wedge. As the going spring unwinds, the wedge that I haven't spoken too much of yet drives another lever. One end of this lever is pushed up and down with the movement of the wedge. On its opposite end, there is a paw which, when the going spring lets down to a predetermined amount, grabs hold of a notched cam located on the seconds bit arbor, therein stopping the second’s arbor from further rotation and stopping the functioning of the train that transfers power to the escapement.

PROBLEMS FOR THE REPAIRER

As mentioned earlier, I had no previous experience with a clock equipped with these specific types of mechanisms. When it came to my shop, the main problem seemed to be that the winding of the remontoire spring was not stopping after the one revolution, thus over winding the auxiliary/remontoire power spring. Upon disassembly, it was found that the #4 arbor had broken just inside the wheel mounting collet. It was also noted that the wheel on this arbor had sustained damage to its gear teeth. Assuming that this was the source of the problem, a replacement arbor and wheel assembly were made. But when the replacement pinion arbor and wheel assembly were installed, the problem persisted. This called for a close examination of the action between the wheels, cam, fly, and levers. And it was found that they were not functioning correctly. It was also found that a stop pin had been placed on the outside of the back plate to restrict the amount of return on the lifting lever. In effect, this pin was performing the function of the unlocking lever, and causing the other levers to be out of their intended positions for stopping the rotation of the train as the maker had intended. After many hours of monitoring the actions

of mechanisms, disassembling the movement, adjusting the levers, reassembling the movement, and more monitoring, it became apparent that some previous repairer had also modified the levers. Therefore I straightened all of the levers, re-secured them to their arbor and tried again. Then came a series of minute adjustments to the arbors to make a proper function between them and the cam, wheels, and the lifting pins of the auxiliary spring barrel. But the problem persisted. Finally, I questioned why lever B was staked hard onto the arbor carrying levers E and K. So, I removed lever B and broached the collet out so that it would fit loosely on its arbor. This did the trick. Since it had come to me with a tight fit on that arbor, I erroneously assumed this to be the way it was intended. However, it took many hours to find this last problem, then a matter of a few minutes to finally put it right.
My purpose for explaining the difficulties of repairing this movement is to point out to owners, collectors, and repairers the importance of not modifying the mechanisms in their clocks, and to encourage them to seek out and patronize dedicated and able repairers. With this clock, it seems like every repairer who worked on it did so with half measures and quick fixes. Each resulted in contributing to an even greater problem. And to undo those ill-made modifications ended up requiring a great deal more time than most commercial repairers would have been financially able to commit to it. In its prior condition, its value as a collectable object of horology was greatly reduced, besides making it a clock that other collectors would have been less inclined to acquire. I wish I could report that the ailments of this clock were the exception rather than the rule. But, for my small repair practice to get so many of these types of clock problems suggests that our clock repair industry is seriously wanting for dedicated and able repairers, those earnestly striving to maintain the integrity of the original clockmaker's intentions.

Now that this Berthoud chronometer carriage clock is functioning properly, it is back again with its owner. I have learned a great deal about some interesting clock mechanisms and become better acquainted with the Berthouds -a fascinating family of eighteenth and nineteenth century horologists.

Author's Note:

This article was originally published in the NAWCC Bulletin in October 1999. The material in this article dealing with the movement and functioning of this clock was prepared and written by Ron Reed, while the historical background of these clocks and clockmakers was the result of research by Tom Wotruba. Ron was an expert in both skill and dedication to excellent clock repair. Unfortunately, Ron Reed passed away in 2001. He was most appreciated by many in Southern California, both personally and for his talent, and will be decidedly missed

Setting Up the Strike Mechanism of a Dent Petite Sonnerie.

Andrew Bliss (Aust.)

Introduction

I recently had the opportunity to work on a 'Dent' carriage clock. It's a French clock, sold under the Dent name and has a very unusual method of executing the functions required of a Petite Sonnerie clock.

Sadly, while working on the clock, I didn't have it in mind to be writing it up for a journal, so the pictures are not as good as perhaps they should be, but I hope the reader can understand the salient features.

Previous history

When the clock arrived on my bench, I was led to understand that it had been looked at by others without the required result. Some doubt was expressed as to whether the clock was Petite Sonnerie or Grande Sonnerie. This confusion arose because the quarter striking was misbehaving and unreliable, at times appearing to be Grande Sonnerie, at others Petite Sonnerie.

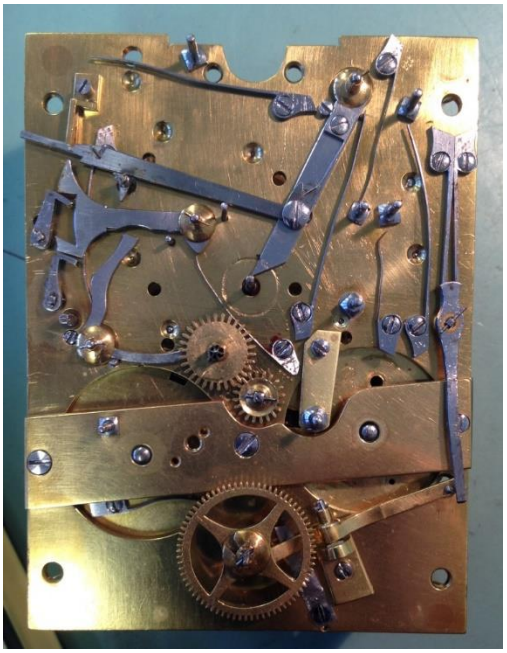
I quickly decided that it was Petite Sonnerie. This was apparent because the strike mainspring barrel was only as large as the time side, and the hammer lifting wheel only had the normal number of pins on it. Grande Sonnerie, because of the many blows that must be struck during the week always have a larger strike barrel and double the normal number of pins on the hammer lifting wheel.

So that was problem number one sorted.

The next problem was plier marks on the racks, the missing rack blocking pin and the observation that this was an unusual mechanism.

The plier marks were just a symptom of previous repairers not having the time or inclination to work out how to set the clock up correctly, the rack blocking pin was reinstated, so that just left working out how to set up this unusual clock to operate properly.

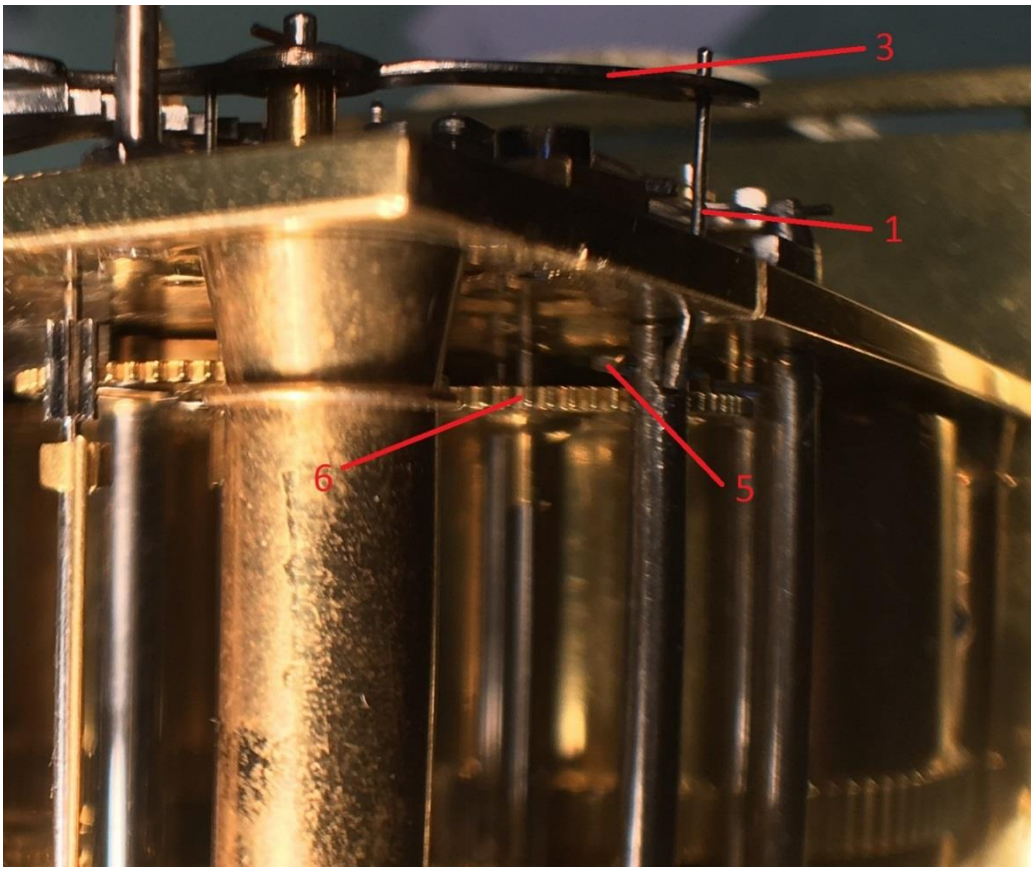
What makes this clock unusual?



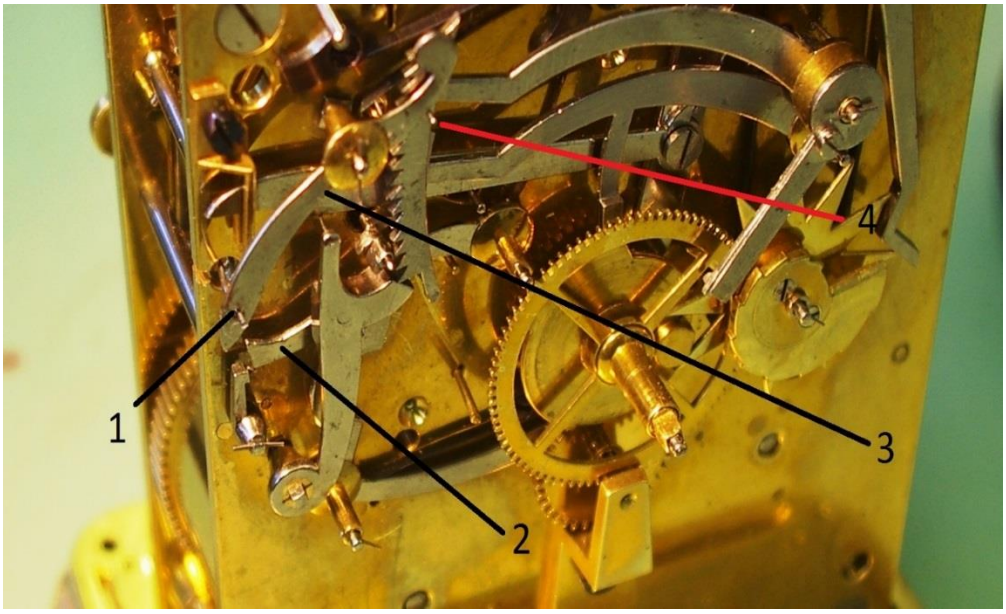
The clock on the left is a conventional Grande Sonnerie with many components removed (to reveal certain parts) the clock on the right is the Dent. The conventional clock relies on a notched ‘axe-head’ shaped piece (visible in the upper left quadrant of the plate) interacting with two hammer shaped pieces which are mounted on the end of the hammer shafts. Depending on the vertical position of the axe head, either none, one or both hammers are allowed to drop on to their respective bell or gong.

In the Dent clock, there is no axe head, just a bar which only acts to inhibit the lower hammer, which is at times the hour hammer, at other times the second of the ‘ting-tang’ strikes indicating quarters, at other times silent.

The hammer shaft that serves the top note of the ting-tang in the conventional clock always engages with the lifting wheel, but except when the ‘ting-tang’ is happening, that hammer shaft is stopped from dropping on to its gong or bell.



In the Dent clock, the hammer shaft serving the top note of the ting tang is normally disengaged from the lifting wheel and is only engaged with the lifting wheel when the ting-tang is happening. This is achieved by a hinged lifting pin on the hammer shaft which is pushed into position at just the right moment to catch the lifting wheel as it passes.



In the picture above, some of the key parts of this unusual clock can be seen. ‘1’ is connected to the hinged hammer lifting pin which will be further explained after the following picture. ‘2’ is the hour hammer inhibiting bar, ‘3’ is a lever which when rotated anticlockwise moves ‘1’ to the right, allowing the top note of the ting-tang to sound. ‘4’ is a pin inserted in the top of the rack.

The hinged hammer lifting pin can be seen above. This is one piece, but is marked ‘1’ and ‘5’. ‘1’ is the piece that engages with ‘3’. ‘5’ (just visible) moves into a position that allows it to be lifted by the pins in ‘6’, the lifting wheel.

When the hour rack has been fully gathered, but the quarter rack has not (that is, when the ting-tang is happening), each time the gathering pallets rotate, they ‘pump’ the hour rack up a little. This action pushes the pin ‘4’ up, which rotates lever ‘3’ anti-clockwise, which pushes ‘1’ to the right, which in turn engages lifting pin ‘5’ with the pin on the lifting wheel ‘6’ just as it passes by. This happens once for each strike of the ‘ting-tang’.

Careful adjustment required

The key to this clock operating properly is to get the timing of the engagement of the hinged lifting pin with the lifting wheel correct. In practice, this is quite hard to achieve.

Firstly, such adjustment was quite impossible with the clock assembled as it arrived on my bench. The timing marks which are common on French clocks to enable the correct setting of the lifting wheel and gathering pallet wheel are not present in this clock. As it arrived on my bench, it appeared to be assembled in a quite sensible setup, however after many hours of observing the clock, I decided that in fact, the timing was one tooth out.

The reason many hours were spent on this decision is that much of the timing adjustment can be achieved by carefully adjusting the position of the gathering pallets on the gathering pallet shaft. Using these adjustments, it was tantalisingly 'almost possible' to get the timing right.

Having made the decision to dismantle the clock and reset the timing, the job became easier, but still quite difficult to set the gathering pallets exactly correctly for operation as a reliable Petite Sonnerie.

Further viewing

I recognise that it's probably quite difficult to understand how this clock works from the photos provided so I have made a video which you can access by clicking on the link below.

https://www.youtube.com/watch?v=ZYOSvLFvSoA

Happy viewing,

A GIFT TO THE NAWCC MUSEUM

Ken Hogwood, FNAWCC (USA)

In Executive Director, Steve Humphrey's December 4th newsletter, the "Museum Object of the Week" featured a French carriage clock which was imported and retailed by the J. E. Caldwell Co. of Philadelphia, PA.

Vintage carriage clocks are seldom donated to the museum collection and not much history of this clock was available to the museum staff.

Noel Poirier, Museum Director, discovered that the picture showing the movement out of the case is not the movement which is actually in the J. E. Caldwell carriage clock donated to the NAWCC museum. Noel has now furnished me with high quality pictures showing the actual movement in this carriage clock.

The American Connection

This clock was made for export to America and is marked on the dial "J. E. Caldwell & Co., Philadelphia".

This carriage clock is well marked by the French maker with the name of the retailer, but is not marked with the name of the maker, which was a common practice at the time. Large, big name jewellery retailers such as J. E. Caldwell, Tiffany, and others wanted to give the impression their own company made the clocks and jewellery bearing their name.

J. E. Caldwell & Co. of Philadelphia was founded in 1839 by James Emmot Caldwell (1813-1881), and was, and still is, one of the most reputable retailers of silver, china & jewelry as well as other fine art objects.

The clock connection to J. E. Caldwell & Co. was due to his employment as a watchmaker for the John C. Farr & Co., an importer of watches and manufacturer of jewelry about 1837. This led to Caldwell opening his own retail store at 136 Chestnut in 1839. The company is now located at 728 Samson St. in "jeweler's row", Philadelphia, Pa. The company is now over 177 years old.

The French Connection

Many carriage clocks can be identified by their movement design and the "punchmark" showing the hands and winding direction, as well as other markings placed on the movement by the maker. These markings allowed me to identify this clock as being produced by Duverdrey & Bloquel.

Duverdrey & Bloquel Co. made and sold this clock, and many others, direct to the J. E. Caldwell & Co. to be retailed in America. This carriage clock is a production carriage clock made for export to America and other countries.

The clock style is generally referred to as "corniche" in a standard size. This is a style used by several other well-known carriage clock makers which had factories in the St. Nicolas d'Aliermont, a region near the French border with Switzerland, separated only by the Jura Mountains. Many of these French carriage clock makers purchased escapements made in Switzerland to complete their carriage clocks.

I have not been able to closely examine this escapement, but it is a common Swiss designed lever escapement used by many French carriage clock makers. The movement is known as a "time & strike" model designed to run 8 days and strike the hour and one strike at the l/2 hour.

This style was very popular during this period, the 1890-1910 "hey-day" of production carriage clocks being made in France, American and Germany, where competition was very keen between the makers of carriage clocks and traveling alarm clocks. I believe this carriage clock was made circa 1900-1910.

Duverdrey & Bloquel, St. Nicolas d'Aliermont was formalized when Joseph Bloquel joined Paul Duverdrey in 1910. They took control of a factory which had been started by Albert Villon in 1867. The company made complete carriage clocks before and after the death of Villon in 1910. In 1922 the company adopted the trademark of a lion with 3 feet on the ground and one foot lifted. The name was changed to Bayard & Co. about 1947, but they still marked their clock movements with the lion and "Duverdrey & Bloquel". The company was still in existence in the late 1990s

Several "Duverdrey & Bloquel" carriage clocks are marked with other names such as finisher/retailer "Richard & Co.", and retailer "J. E. Caldwell & Co.", as well as many other retailers in the USA & Europe.

Footnote:

The directional winding arrows on Duverdrey & Bloquel carriage clocks are very similar to those found on carriage clocks made by the Couaillet family firm which began in 1892 at Saint-Nicolas-d'Aliermont, France. It is possible the two firms employed the same engraver in the early years of both firms.

NAWCC MUSEUM DONATIONS

Noel Poirier, Museum Director

The NAWCC museum is always happy to consider donations that will enhance the breadth and depth of its collections. We look forward to meeting prospective donors and adding wonderful objects. Please do not drop off or mail objects without first contacting the museum – we want to make sure that your potential gift is properly identified and cared for.
In advance, please accumulate as much information as possible about your planned donation. For example, maker, age, condition, history of ownership (provenance), etc. If possible, take clear and detailed photographs. Then, contact the Curator of Collections, Kim Jovinelli either via email: kjovinelli@nawcc.org or by telephone at (717)684-8261 ext. 203 to discuss your potential donation.
You can learn more about the process by visiting our website:
http://nawcc.org/index.php/museum-collection:214/donating-objects.

"THE CARRIAGE WAY"

Newsletter of the International Carriage Clock Chapter 195

"The Carriage Way" a quarterly online newsletter is always interested in publishing articles on interesting vintage carriage clocks giving the background and history of these wonderful timepieces which are part clock and part watch. If you are member of Chapter 195 and have an interesting story to tell about one of your carriage clocks, our President/Editor, Stan Boyatzis would welcome hearing from you on his email: carriageclocks@optusnet.com.au

Do you own a carriage clock?

If so, you may have questions about your clock.

Such as - - - -

1. When was it made and by whom if it is not signed by a maker.

   Many carriage clocks are marked by retailers, such as “Tiffany”. Many times the maker is not identified. However the maker can often be identified by the construction style and other tell-tell signs found on the movement.

2. Should I clean the case, or not?

3. And the greatest question of all, what is its value.

   This is the hardest question to answer because of the many variables, such as condition of movement and case, the name and standing of the clockmaker, & the quality and rarity of the clock. We are not licensed appraisers. We can only advise you where to look for comparable clocks so you can make your own "best guess" as to the actual value, always remembering the oldest approach to a value is "Willing Buyer, Willing Seller".

Members of our chapter have many years of experience collecting, researching and restoring carriage clocks. Many are willing to help you answer some of these questions.

This free service is for NAWCC members only.

Email questions and pictures of your carriage clock (one clock at a time, please) to:

Ken Hogwood: (USA) kenhogwood@aol.com

Doug Minty: (Australia) dminty@optusnet.com.au

Link to the Online Galleries website:
www.onlinegalleries.com/art-and-antiques/antique-clocks/carriage-clocks

Link to the 1stdibs website:
https://www.1stdibs.com/furniture/more-furniture-collectibles/clocks/?q=carriage+clock

Link to the Invaluable website:
http://www.invaluable.com/catalog/searchLots.cfm?scp=u&wa=carriage%20clock&shw=50&houseletter=A&ord=0&ad=ASC&img=1&ns=1&olf=1&row=51