

“The Carriage Way”



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Carriage Clock from the Franche Comté.

President's Report



Stan Boyatzis

Welcome to our first newsletter for 2016. I hope you all had an enjoyable and relaxing break over the Christmas period

Membership of Chapter 195 now stands at 177 and the executive is working 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.

I was unable to attend the Breguet exhibition at the Legion of Honor museum in San Francisco. If any member attended the exhibition and took photos of the carriage clocks I would like to hear from them and if possible include the photos in a future newsletter. Breguet's first carriage clock No.178 was sold to General Napoleon Bonaparte. This together with four other Breguet's early travel clock were on display at the exhibition.

This month's feature article is on "A Unique Breed of Carriage Clock" by Tom Wotruba (USA). It is an unusual Franche Comté quarter-striking carriage clock with double hour strike and alarm. This article was previously published in Clocks magazine by Tom in 2010 with a different title.

Doug Minty (Aust.) has written a short article on "How to wind a Carriage Clock". Although it appears to be a simple process Doug explains the various problems that can be encountered and how to overcome these. Both Tom and Doug welcome any questions or comments on their articles.

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.

Members of the Executive Committee:

Stan Boyatzis: President (Aust.) Email: carriageclocks@optusnet.com.au

Keith Potter: Vice President (Aust.)

Doug Minty: Secretary (Aust.) Email: dminty@optusnet.com.au

Ken Hogwood: Director (USA).

John Hamilton: Director (Aust.)

Carl Sona: Director (Aust.)

Tom Wotruba: Director (USA)

Email: carriageclock195@hotmail.com

A Unique Breed of Carriage Clock. Tom Wotruba (USA)

Introduction

Some time ago I saw a carriage clock listed by a major auction house that aroused my curiosity and captured my interest. This clock was defined as an unusual Franche Comté quarter-striking carriage clock with double hour strike and alarm. A little research in the major carriage clock books by Charles Allix and Derek Roberts (all sources I used are listed at the end) confirmed what I suspected – that double-hour striking carriage clocks are indeed quite rare. So I plunged into the bidding and succeeded in acquiring the clock that is shown in Figure 1. A cursory look does not reveal the unique character of this clock, as I learned soon after unpacking it and examining its components and features. In fact, I came to realize that this carriage clock combines aspects from Capucine and Comtoise (sometimes called Morez or Morbier) traditions in addition to the more typical components of mainstream French carriage clocks. This clock combines a medley of features unlike any other carriage clock I have known.



Figure 1. Carriage Clock from the Franche Comté.

The Clock and Its Appearance

Case style and size. The multipiece case with a cast foliate design contrasts with traditional styles of the more common French carriage clock cases (obis, corniche, or gorge with any decoration usually from engraving). The case height of 7 ½ inches including the distinctive serpentine handle is taller than many so-called “full” size carriage clock cases. This coupled with the relatively large 4 ½ inch width at the base hearkens back to the more generous sizes found in the Comtoise and especially the Capucines that were the predecessors of the carriage clock.

Dial components. The main dial has Roman chapters and moon hands, not unusual but much like the earlier Capucine clocks. The chapter ring is particularly large however, sporting a 2 ½ inch diameter (compared with the most typical 2 inch ring on most French carriage clocks). Morbier wall clocks and Capucines brandished large chapter rings as well, perhaps to make them more easily visible at greater distances. Arabic numerals and a pointer hand comprise the alarm dial, which is also relatively large. Based on the size of the case and dial components, the clock exudes a rather stately look. In addition the dial has a signature and this gets more detailed attention further on.

Platform. The vertical platform viewed through the top window in Figure 2 has been elaborately engraved, an effort seldom seen in traditional French carriage clocks. The lever escapement and plain balance are distinctly carriage clock features, though plain balances are relatively simple compared with the compensated balances of many French carriage clocks. Comtoise and early Capucine versions were more likely weight driven and pendulum controlled with verge escapements. Some later Capucines did have cylinder escapements with balances, however.



Figure 2. Platform viewed through top window.

The Movement

Twin barrel. This clock has a twin barrel movement with eight day duration and the rack work planted externally on the backplate as is true for most Comtoise and Capucine clocks. It is not numbered and contains no names or markings on any of the plates.

Strikework. Figure 3 shows the backplate where the strikework resides. In French carriage clocks, the strikework is more typically behind the dial plate and not visible through the back door. The snail clearly shows that this is a quarter striking clock but there is no repeat on demand so no repeat button is seen on the top of the clock in Figure 1. French carriage clocks with quarter striking (e.g., *petite sonnerie* as well as *grande sonnerie*) are very likely to be repeaters. Repeating in Capucines and Comtoises was generally found in those that struck the hour and half hour only, though some Capucines and a rare few Comtoises did strike the quarters but without repeating. So the pattern in this clock most closely resembles that of the Capucines.



Figure 3. Backplate with strikework.

Hand set. The hands are set to time from the front with fingers through the hinged front door (see Figure 4), presumably because the layout of the striking work eliminates room for a hand-setting arbor on the backplate. The alarm is set from the back, however. It is unusual in French carriage clocks to require manual setting through an open front door because of the risk of damage to the clock hands which are often delicate. Comtoise and Capucine clocks are likewise set to time from the front, but their sturdy steel hands were less prone to damage.



Figure 4. Hinged front door open for setting hands.

Alarm. The alarm is wound by pulling a gilt metal chain that extends through the top of the left side of the case (see Figure 4) and is capped by a bell-shaped toggle as shown through the top window in Figure 5. Pulling this chain winds a spring barrel also visible in Figure 5 just inside the front plate. Similar pull-wind alarm mechanisms are often found on the Morbier (Comtoise) clocks as well as on the Capucines.



Figure 5. View of pull chain to wind alarm.

Bells. The predominant practice for striking and repeating French carriage clocks is to carry the bells (or gongs) on the backplate. But that is not true for our subject clock or for most Morbiers and Capucines. Figure 6 shows that for this clock the bells and hammers for the quarter striking and the alarm are housed in the base. Bells on Capucines are typically found mounted above the top of the case while on bells on Morbiers are often found at the top behind the pediments that commonly characterize this clock form.



Figure 6. Bottom of clock with bells and hammers.

Double hour strike. This clock has a ting-tang strike and sounds the hour on the lower-pitched bell with a single hammer. Two minutes later the hour is sounded again, thus describing the term “double strike”. The quarter hours are sounded with both hammers on the lower- and higher-pitched bells – one ting-tang for 15 minutes past the hour, two ting-tangs for 30 minutes past, and three ting-tangs for 45 minutes past the hour.

This striking sequence is governed by a cam below and slightly right of the snail as seen in Figure 3. As this cam rotates clockwise and reaches an indent, the hook-shaped lever to its right is propelled into the indent by the uniquely designed spring pushing against the pin at the lever’s base. The movement of this lever activates the lifting piece running from behind the snail to the rack mechanism further left. The cam contains three sets of single indents, one for each quarter, and one set of double indents for the hour double strike.

Figure 7 shows the cam in position just prior to the lever release for the first of the double hour strike at 10 o'clock. (In Figure 3 the cam position was about 2 minutes later just prior to the release for the second of the double hour strike.)

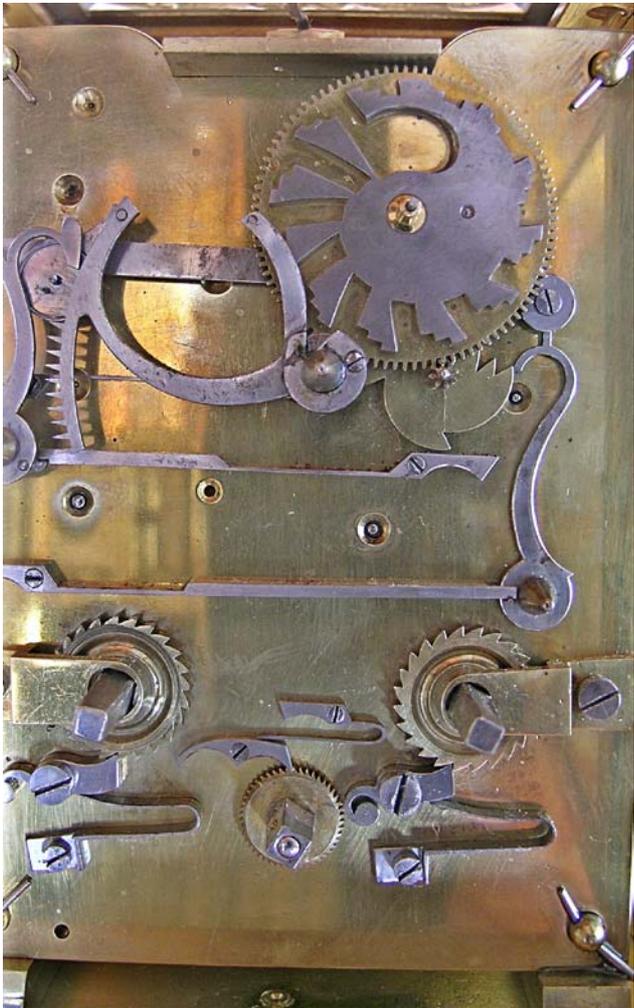


Figure 7. Cam position just prior to first double hour strike.

In Figure 8 the cam has rotated further and approaches the first quarter release indent.

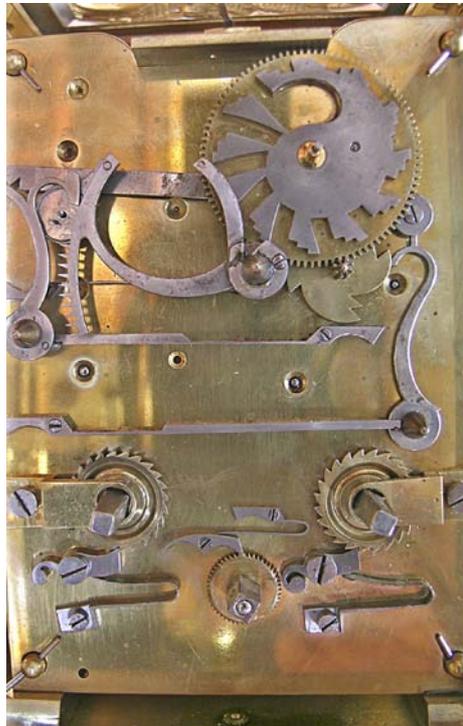


Figure 8. Cam position approaching first quarter hour strike.

This double hour strike and its associated mechanism is perhaps the most conspicuous of the unique features of this clock. The cam not only activates the rack mechanism but also directs the functioning of the hammers located on the dial-facing side of the front plate. At the hour a lever moves the hammer for the high-pitched bell so that the hour and its double are struck by the low-pitched bell hammer only. At the quarters the hammer for the high-pitched bell comes back into action so that the quarters receive the full ting-tang strike. Morbier and Capucine clocks that double-struck the hours used similar mechanisms. In fact, double-hour striking is often identified as “Morbier striking.”

What was the reason for double striking the hour, a pattern that was common in church and other public clocks in Europe in the mid 18th and 19th centuries? It certainly gives a listener who was not paying attention at the first strike a second chance to discern the hour. Some speculate that the repetition kept people from losing track of time, helped them overcome tardiness and gain a sense of punctuality.

The Maker

The dial contains the name SAN^{go} LACROIX, translated by the auction house as Santiago Lacroix. Figure 9 shows a close-up of this signature and its position on the dial. No numbers appear anywhere on the clock or its movement nor are there any other markings. So it seems reasonable to assume that Santiago Lacroix was this clock's maker. But all my attempts to locate this name in a variety of sources have so far not succeeded. There is ample evidence that the name Lacroix was associated with clockmaking in the Morez region of France during 1800s. For instance, in their book Maitzner and Moreau provide 13 listings of Lacroix in the Franche-Comté based on listings in Tardy's *Dictionnaire des Horlogers Français* with additions. None of these is a Santiago, though there is a Lacroix Frères of Morez in 1830 so Santiago might have been one of the brothers. A similar review of the book by Nemrava turned up eleven listings for Lacroix, but no Santiago. Since this clock is very unusual and possibly one-of-a-kind because it is unnumbered, this particular person with the name Lacroix might not have been very prolific or well-recognized, and hence became overlooked as history was recorded.



Figure 9. Close up of makers name on dial.

Conclusions and Requests

The blending of features from traditional French, Comtoise, and Capucine clock designs makes this an unusual and intriguing carriage clock. Based on my correspondence, I learned of only one other in addition to the example pictured in Allix's book. That one other is in the Morbier Clock Museum in Dusseldorf Germany. It has an iron cast case, a carrying handle, and it double strikes the hour. But it is not signed. I would be most delighted to hear from anyone who has seen a carriage clock with similar characteristics, especially double hour striking. Of course, any information or ideas concerning Santiago Lacroix would be most appreciated as well. Finally, does anyone know what, if any, is the proper horological name for the little rotating cam pictured in Figures 3, 7, and 8? Please let me know at twotruba@mail.sdsu.edu.

Sources Used for This Article

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How to wind a Carriage Clock. Doug Minty (Aust.)

The simple task of winding a carriage clock can have many complications if not carried out correctly, and with the correct keys. Carriage clock keys have a dual purpose, with the larger end fitting the mainspring arbor, and the smaller end used to set the hands. Figure 1.

Carriage clocks may have a time mainspring, strike mainspring and/or an alarm mainspring that need winding with a key. The arbors for setting the hands and alarm don't have a mainspring but need a key to set them.

In most multi-function carriage clocks a double ended key will suffice for winding the arbors.



Figure 1. A variety of carriage clock keys.

Carriage clock plates usually have arrows giving you the direction (these arrows can be used to identify the maker) to wind the clock and set the hands. Figure 2.

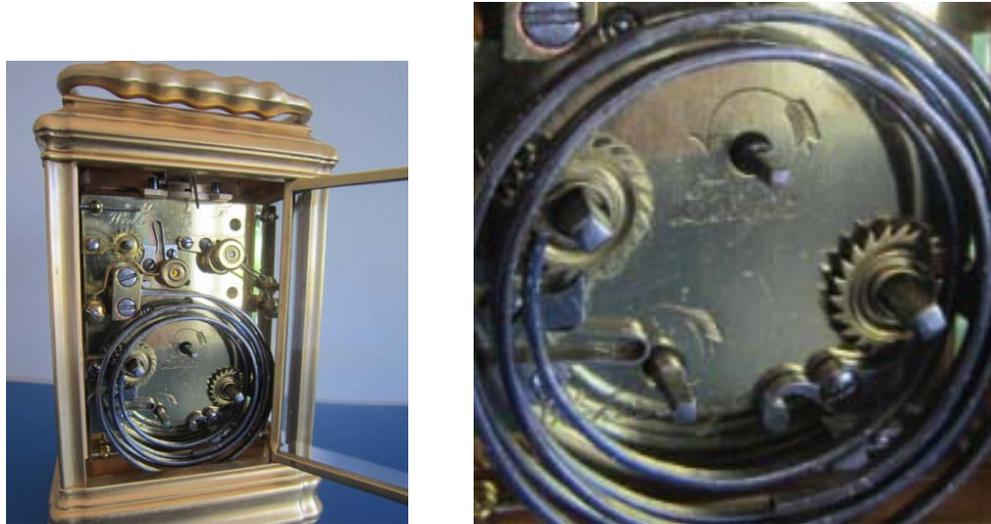


Figure 2. Arrows indicating direction to set hands.

If you are not using the correct key, and struggling to find a small enough key to fit the handset, try pocket watch keys. The keys must fit the arbors neatly, and having determined the correct direction, proceed to wind the clock slowly. Do not wind the mainspring up too tightly as this can bind the coils of the mainspring, and the clock may not go, especially if the movement needs servicing, and the mainspring is dirty and needs cleaning and oiling.

Clocks with a fusee need careful winding as the stop work mechanism and chain may not have been set up correctly during servicing. The stop work will prevent "overwinding".

Due to the constraints of the case, make sure that you let the key return the ratchet wheel back against the click gently, so as not to apply any shock against the click screw. Once there is no pressure on the key, it can be removed and repositioned to allow for further winding until the mainspring is fully wound. It makes no difference which mainspring you wind first.

If you are using a double ended key, you have to be careful when you have the back door open to make sure that the key does not catch on the door, or any of the other arbors, and make sure the key does not catch the end of the platform regulator.



Figure 3. Front wind carriage clock with door opened sufficiently to minimise interference from key when the clock is wound.

If the hands are covering any of the winding arbors, just allow the clock to run until the arbor is cleared. Figure 4. If it is a time only clock, you can turn the hands carefully either forwards or backwards until the arbor is clear. Then wind the clock and reset to correct time. On a chiming or striking carriage clock, under no circumstances do you set the hands backwards as this can lock up the chiming mechanism. If the carriage clock is wound through the front door, the same caution is necessary, especially the key clearing the hands and the centre arbor. Also avoid damaging the dial when inserting the key on a front wind carriage clock.



Figure 4. The hour hand at 8 o'clock covers the winding arbor. Allow the clock to run to 8:30 before winding

Figure 5 shows a giant carriage clock with heavy time and strike main springs. Although the short key fits the arbor, winding is difficult, as adequate leverage cannot be obtained to wind the arbor.

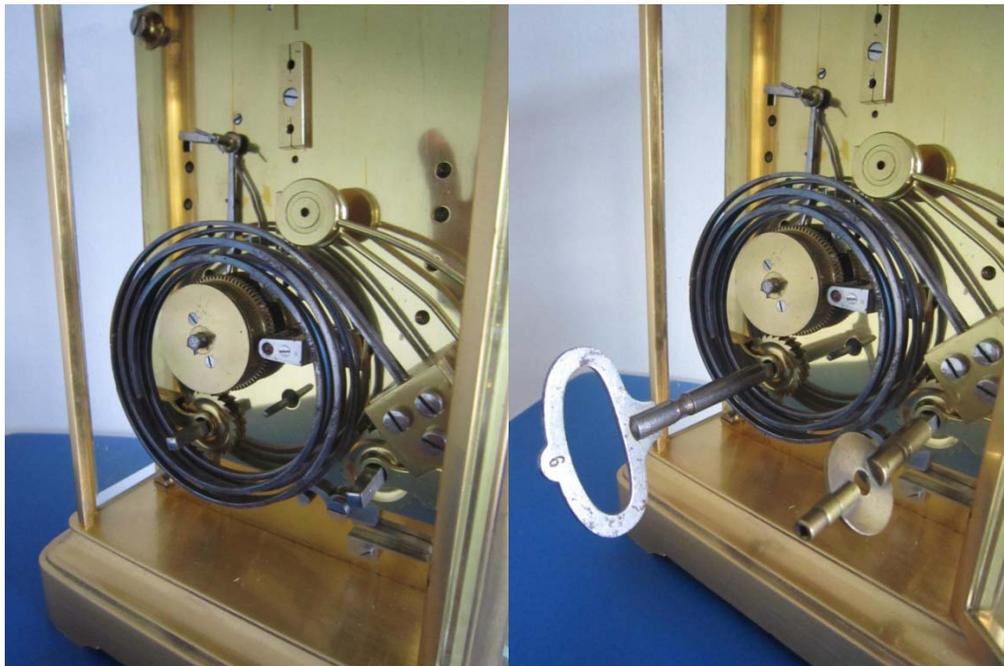


Figure 5. Both keys fit the arbors but only the large one is suitable.

Breguet's wooden travel clocks (carriage clocks) had the winding arbour concealed under the bezel so if the dial around the arbor was damaged it would not be visible. Figure 6.



Figure 6 a. Breguet No.2020 showing winding arbor concealed under bezel.



Figure 6b. Key inserted on arbour ready to wind the clock.

Figure 7 shows a two sided dial carriage clock with the winding arbors under the base. The clock needs to be tilted to wind the main spring and set the dial.



Figure 7. Winding the carriage clock and setting the time is through the base.

Clock keys and clock arbors suffer from wear and cracking and should be checked regularly. Some small carriage clocks are wound through the base and have a female square hole that needs a square arbor to wind the clock. Figure 7.



Figure 8. A miniature Thomas Cole carriage clock requiring a small square arbor to wind the clock

Many carriage clocks have multiple functions that require different key sizes. These include time, strike, alarm, chiming or any combinations of the above.

Some carriage clocks have shutters that hide the winding arbors. These shutters assist in keeping the dust out of the movement. Cast cases with shutters are designed to give the appearance of sealing the case and improve the aesthetics.



Figure 9. A standard and miniature carriage clock with shutters on the back.

Carriage clock travelling cases have compartments in the side of the case to store the key. Figure 10.



Figure10. Key compartment on the side the travelling case.

Carriage clocks can be damaged by using the wrong keys and the wrong winding actions. **SO PLEASE BE CAREFUL.**

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 it's 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