

## An Introduction to

# CARRIAGE CLOCKS

by Doug Cowan (OH)



Figure 1. French *Corniche* cased carriage clock, circa 1890.



Figure 2. American Gilbert alarm clock, circa 1890.

### Background

Carriage clocks are one branch of a much larger family of traveling clocks. The French get the credit for developing the carriage clock, which in its most common form is a five or six-inch-tall gilded metal or polished brass timepiece or clock as shown in Figure 1. It has a balance-wheel-controlled lever or cylinder escapement with the balance platform placed horizontally across the top of the movement's vertical plates.

The name "carriage clock" is a term that has been in general use in English-speaking countries since at least the mid-1800s. Some readers may mistakenly surmise that "carriage clock" refers to a type of decorative clock (often rendered in porcelain) that is shaped in the form of a carriage and horses. Actually the words are an inference to the carriage clock's portability; i.e., its ability to be "carried" on a journey. The French did and still do call these timepieces *pendules de voyage* ("traveling" or "trip" clocks). They also had related clocks that they called *pendules d'officier* ("officers' clocks") and *pendules portative* ("portable clocks").

The English term has grown in common use to include small and portable clocks such as alarm clocks (Figure 2) and strut clocks (Figure 3), among others. In fact, Internet auction sites exploit the popularity of the name by calling almost any small, portable clock a carriage clock. Too bad there are no applicable trademark laws!

### History

The history of traveling clocks extends back at least 200 years before the 1800s development of what we call carriage clocks. This evolutionary process started with portable watches, some of which by the 1600s also struck the hours and included alarms, using spring-driven balance wheel escapements just like carriage clocks do. During the 1700s many other styles of portable clocks were developed—not the least of which was the marine chronometer—surely the ultimate spring-powered traveling clock!

Once invented, carriage clocks became style leaders and remained incredibly popular for two centuries. They are still being made today, especially in China. The Chinese clocks imitate the style of fine French clocks but reveal their origins upon inspection of the relatively crude movements. But who knows, perhaps that will change, too.

In 1798 the French master A.L. Breguet supplied Emperor Napoleon with a fine carriage clock for use in his Egyptian campaign. Napoleon liked it so well that he recommended that his generals buy them. As a Breguet dating from about 1837 (Figure 4) illustrates, these carriage clocks exhibited beautiful workmanship, and following Napoleon's successes in Egypt, many French styles of carriage clocks became popular throughout Europe. In addition to being attractive they were very sturdy and practical due to their horizontal platform design. French carriage clocks were from the beginning mostly 8-day running with a push-button repeat on the top to sound the last full hour. This was not just a novelty. At night homes and carriages were dark, and the push-button repeat was fully utilized. The early French carriage clocks were produced in small quantities by very few makers and were undoubtedly "not for the masses," due to their high cost. French carriage clock makers used the lever escape-

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**Figure 3.** English strut clock by Thomas Cole, circa 1849.

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**Figure 4.** French Carriage clock by Breguet, circa 1837.



**Figure 5.** English carriage clock by James McCabe, circa 1860.

ment almost entirely until low-priced competition moved them, after 1880, to make some cylinder escape- ment clocks in their less expensive lines. With very few exceptions French carriage clocks used going barrels, not fuseses, to release power to the clock gear trains.

By 1820 English carriage clocks were introduced by chronometer makers and other eminent timekeeper craftsmen in England. Many such instruments were cased in brass-bound mahogany cases and had chain-fusee movements. High-quality lever, or even chronometer, escapements were used. English carriage clocks were even more expensive than most French ones, a circumstance that finally resulted in their market demise by 1900. Figure 5 shows a typical circa-1860 English carriage clock by James McCabe.

In 1830 French clockmaker Paul Garnier achieved a breakthrough when he began small-batch production of 20 or so carriage clocks at a time. Until then these clocks had been basically made one at a time. Garnier is also well known for innovative escapement design and use of the soon-to-be-copied one-piece case (Figure 6). French makers soon held a clear lead in this clock category and

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**Figure 6.** Paul Garnier, Paris, one-piece style case, circa 1840s.



did not lose it until about 1900, when American and German low-priced carriage clocks took much of their market.

By 1840 Austrian and Swiss carriage clocks also were being made. In most cases they resembled French ones but nevertheless retained their own personalities.

For example, the Austrian clocks usually were made to run only 40 hours, whereas virtually all French clocks ran for eight days. Figure 7 shows a Viennese clock circa 1850. There were a few very early Swiss carriage clocks but the standard form, shown in Figure 8, was in place by the 1840s. At first, the Swiss clocks were wound through the dial plate. Later Swiss clocks were wound from the rear but still had no hand-setting arbor through the backplate, and setting was done by hand via a door in the front. This necessitated heavier than usual clock hands to resist breakage (Figure 8, circa 1855). By the 1870s, “Swiss” carriage clocks were actually being made in France while being inscribed with the names of Swiss retailers.

By 1860 the boom in carriage clock popularity had begun, and English customers comprised France’s best market. At about this time gongs



replaced bells, as the sound of gongs was considered more attractive. Between 1860 and 1900 manufacturers, case sizes and styles, and movement complications proliferated as the market grew and competition increased.

By 1880, American (Waterbury and others) and German (Junghans and others) mass producers were at work along with the French, and the competition was fierce. Also, common alarm clocks were competing with the ordinary consumer's choice of a small portable house clock. Figures 9 and 10 show Waterbury and Hamburg American carriage clocks from the 1890s.

Almost all of the carriage clocks seen at antique venues today were made between 1885 and 1914. World War I devastated economies, and new technology, such as was seen in electrical clocks and wristwatches drove fashion after the war. By then also, few carriage clocks actually traveled anywhere. There were inexpensive portable alternatives for flexible timekeeping, such as pocket watches and alarm clocks. Still, carriage clocks remained fashionable, and simulated-leather traveling boxes for them were still sold, although by 1900 this was usually an extra-cost item.

Since 1915 small-batch production of carriage clocks has sporadically continued in France, the United States, England—and now in China. The clocks are liable to incorporate quartz battery-powered movements, but a steady supply of spring-powered clocks also continues to sell. Their day is not over yet!

### Case Shapes and Styles

French carriage clocks formed a reasonably well-documented group in that the case styles had names that were accepted by virtually all manufacturers. A variety of shapes proliferated as the carriage clock market grew, and most shapes were introduced after 1880. The following list includes most of the shapes currently found in the marketplace. (Note that the French clocks are commonly identified by their French names. I have included English translations in brackets for clarity.)

**One Piece.** Early French carriage clocks included one-piece and multi-piece cases in the one-case style (Figure 6), both popular from about 1826 to 1860. Actually, none of these cases were made in one piece. The earliest, until 1845, used at least three castings including the body, base, and handle. Later clocks were

similar except that the body was made up of several pieces screwed together. Still they all had that “chunky” square look with a large glass area at the top for viewing the escapement.

**Borne** [milestone] cases were introduced in the 1830s and revived as a style circa 1900 (Figure 11).



Figure 7. Austrian 40-hour multi-train clock, circa 1850.



Figure 8. Swiss clock, circa 1855, front hand set.



Figure 9. American Waterbury.



Figure 10. German Hamburg-American alarm clock, circa 1890.



Figure 11, above. *Borne* case style revival, ca. 1900, English.



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Figure 12, right. Engraved French oval case, circa 1850.



Figure 14. French *Anglaise* case with porcelain panels, circa 1885.



Figure 13. French giant *Gorge* case with travelling box, circa 1885.

**Oval** cases began sometime after 1850 (Figure 12).

**Gorge** [grooved] cases were in use by the mid-1860s and were the shape preferred by French makers for their best clocks (Figure 13). At least five sizes were made, ranging from miniatures to giant clocks.

**Corniche** [cornice style] clocks were introduced circa 1875-80. This is the most commonly seen case shape (Figure 1).

After 1880, and until the early 1900s, the following case styles were used:

**Anglaise** [English].

**Art Nouveau** [new art].

**Bambu** [bamboo], also called *Chinoise* [Chinese].

**Boite** [box].

**Cannalee** [fluted]. This style looked very similar to the *Gorge* style.

**Cariatides** [caryatides]. The clock corners were female figures from classical mythology.

**Doucine** [serpentine].

**Fantasy Shapes** [bird cages, sedan chairs, etc.].

**Obis** [double zero]. This looked like a less expensive *Corniche*, and was almost always a design used for the least expensive timepieces and alarms, with the dial mounted directly onto the front plate of the movement rather than onto a separate plate. This is a confusing term because the word *Obis* also referred to a certain movement size, separate from its case-related meaning.

**Oblong**. A rectangular shape as in a stretched box.

**Rococo**. Somewhat resembled art nouveau but with style differences.

Finally, a few manufacturers actually invented their own names for their clocks, such as **Boite Jonc** [reed-ed box] or "**Madelaine**," a pedimented style often using marble or onyx in the design. This is pure speculation, but I think that the naming of these clocks may have been due to the influence of mass-produced American carriage clocks, which bore names rather than case descriptions.

American carriage clocks seem mostly to have used catchy names, such as "Pilgrim" (New Haven), "Pert" (Ansonia), "Conductor" (Waterbury), "Little Corinne" (Welch), and "Dorrit" (Seth Thomas).

Figure 9 shows a typical Waterbury repeating carriage clock with case.

#### Case Sizes

French carriage clocks showed the greatest variation in size, measuring from 2.6 to 12.0 inches tall





Left to right: **Figure 15.** French Art Nouveau style, circa 1900. **Figure 16.** *Bambu* case, French, circa 1900. **Figure 17.** French *Cannalee* case with period painted dial, circa 1885. **Figure 18.** French *Obis* case, for timepieces and alarm clocks, circa 1910.



**Figure 19.** Some size variations from 9.5 to 3.0 inches tall (handle up).



**Figure 20.** French *Doucine* case, circa 1885.

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(with handle up). Most American, Austrian, and Swiss clocks were in the middle of the French range, measuring from 3 to 8 inches tall. Despite the almost continuous size range of French clocks, it is currently customary to describe them as falling into one of three groups. “Regular” includes clocks in the range of 4.55 to 7.5 inches tall. “Miniatures” (sometimes called *mignonettes* [“little darlings”]) are less than 4.5 inches tall, and “Giant” carriage clocks are usually about nine inches tall.

Far fewer giant carriage clocks are found today, and they, as well as the miniatures, tend to date from after 1875.

### Mechanical Variations

Most French carriage clocks were eight-day. The early ones had distinctive maker-designed lever

escapements and usually struck the hours and repeated them by a push-button on top of the case. In the late 1800s the French introduced timepieces, cylinder escapements, and even a few spring detent escapement clocks.

Austrian and Swiss carriage clocks resembled the French ones, except that many, if not most, Austrian ones ran for 40 hours.

American carriage clocks were mass-produced with very little hand finishing. They mostly utilized inexpensive pin-pallet escapements mounted vertically instead of horizontally, 30-hour and eight-day winding, some with hour repeating buttons. A notable exception to this was the production of Joseph Eastman’s companies—the Boston, Harvard, Fairhaven and Vermont Clock Companies—circa 1880-1908. Those clocks had lever escapements with jeweled pallets (Figure 21).



**Figure 21, left.** Boston Clock Company, Athens model, numbered C3532. Circa 1890, American, 6-1/2" high.

**Figure 22, right.** English going-barrel clock, circa 1860.

English carriage clocks ran eight days and used high-grade lever or spring escapements. They also usually struck the half hours (one chime) and the hours, sometimes with push-button hour repeating. A separate class of small going barrel timepieces was introduced in the 1830s. These are much less well known to today's collectors (see Figure 22).

But it was the French makers who excelled in complications, especially in the late 1800s.

The following list describes what was available in their clocks, in order of increasing complexity: simple timepiece; timepiece and alarm (alarms could be added to almost any other clock); chiming the hours with one stroke at the half hour; and push-button repeating doing any of the following—hours; quarter hours, five minutes, or one minute.

Quarter striking was of two basic types. In *petite sonnerie* (little chime), the clock struck the first three quarter hours but only the hours at the hour. In *grand sonnerie* (big chime), the clock struck the hours and quarters at every quarter. In both cases two gongs or bells were used. Virtually all *grand sonnerie* clocks included a lever under the base to reduce the striking to *petite* or even silent if desired. The striking or *petite sonnerie* could similarly be reduced. And there were a few *petite sonnerie* clocks that did not have a silent switch. In addition, center sweep seconds were sometimes offered, as well as subsidiary seconds (small seconds dial), calendar dials (day and date), barometer, or thermometer. Certainly something for every taste!

### Comments

If you have found my brief summary of carriage clocks of interest, you should now be more knowledgeable about these attractive timekeepers. Perhaps the

most significant facts are that the great majority of carriage clocks were made after 1880 and before 1914 and that production of mechanical (as opposed to quartz/battery ones) has never stopped completely since the early 1800s. One could go on endlessly, but for the beginning enthusiast here are a few miscellaneous points of interest:

The Japanese made carriage clocks between World Wars I and II. Some of them had push buttons that rang a bell—to summon someone—I presume.

The beautiful engraving seen on many high-grade French carriage clocks was available as a purchase option when the clock was new, at a higher price.

Except for a handful of makers, the names on the dials of French carriage clocks refer to retailers, not makers. That is also true of many of the marks on the backplate as well, one of the most common being an HH mark—which refers to a New York importer.

Most carriage clocks were not signed by the makers, but when they were, collector value has increased. The exceptions to that are clocks by Japy Freres, Duverdrey and Bloquel. These signatures do not add much collector value because the products of these firms were not always of excellent quality.

### References

The information that I have shared with you has been accumulated in notes from over 30 years of reading books and magazines, and through discussions with other collectors and carriage clock dealers. If an alert reader discovers errors, please do communicate them to me. The author thanks Tom Wotruba for the use of several of his photos.

The following books contain worthwhile carriage clock material. All are out of print but can be found in the used book market or by loan from the NAWCC Library and Research Center:

*Carriage Clocks, Their History and Development* by Charles Allix, Antique Collectors' Club, 1974. This is absolutely the best book and should be read first.

*Carriage and Other Traveling Clocks* by Derek Roberts, Schiffer Publishing, 1993. Roberts adds to the start that Allix made.

*A Century of Fine Carriage Clocks* by Joseph Fanelli, Clock Trade Enterprises, 1987. This is a picture book, but a spectacular one.

### About the Author

Doug Cowan is the immediate past-president of the Association and has recently taken over the position of Answer Box manager for the BULLETIN. Among other horological activities, he and his wife Jean have had a long-standing interest in carriage clocks.