

“The Carriage Way”



International Carriage Clock Chapter #195 Founded 2013

The National Association of Watch and Clock Collectors

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A selection of Carriage Clocks made in America

President's Report



Stan Boyatzis

Welcome to our second newsletter for 2022 with a special welcome to our new members. If this is your first newsletter, I hope you enjoy reading it, and please don't hesitate to email me with any comments you may have. The executive continues to work hard to promote the chapter and I again 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 myself. Details are at the back of the newsletter.

Chapter 195 is hoping to co-chair the 2023 National in Lancaster with an exhibition at the museum in Columbia to celebrate the NAWCC 80th Anniversary. Discussions are underway for the National to be held at the Marriott which will be the location of the mart and lectures. Chapter 195 will have a Face to Face meeting.

This month's feature article is by Ken Hogwood (USA.) on "Carriage Clocks made in America". Ken discusses his research on the American clock companies that made carriage clocks for domestic and export sales between the 1880s and 1920s. American carriage clocks tended to be cheaply made compared to their European counterparts with the exception of carriage clocks made by Joseph Henry Eastman and his associated companies. These were made using similar manufacturing ideas and processes that had been practiced in France for more than 50 years.

The second article is by Lester M. McAlister (USA) on the repair of a "Pierre Millot Bell Strike Grand Sonnerie French Carriage Clock". This clock has a unique balance platform. The balance is impulsed by an underslung pallet fork driven by a deadbeat verge and escape wheel.

Both Ken and Lester welcome any questions or comments on their articles.

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.

<https://new.nawcc.org/index.phpSEB195rosshogan@optusnet.com.aup/chapter-195-international-carriage-clock>

In this newsletter, I have included also a section on carriage clocks sold at the recent Schmitt Horan & Co Clocks, Watches and Antiques Auction on Saturday/Sunday 11th and 12th of June. This includes estimates, condition reports, and prices realized and I hope members find this useful and of interest.

A link to the 1stdibs website is included. This is a useful website 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.

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Made in America

By Ken Hogwood, (USA) FNAWCC

INTRODUCTION

I was asked to give a lecture on American carriage clocks at the 2012 Ward Francillon Time Symposium. I began by researching the American clock companies that made carriage clocks for domestic and export sales between the 1880s and 1920s.

My research showed American clockmakers were using the same manufacturing processes for carriage clocks they used to flood the world marketplace with cheap pendulum mantel and wall clocks made with stamped sheet brass gears and cheaply made escapements, meant to last for only a few years, meaning 25 to 30 years. However, this did not produce a quality carriage clock equal to the ones being produced by the French in the 1880s & 1890s. The French clockmakers made carriage clocks designed and made of high-quality materials by true artists working in metals. They used heavy, hammered brass plates, heavy brass gears cut and polished to perfection, highly polished pinions made from high quality steel, and platform escapements using jewels to reduce friction and wear. These carriage clocks were made to last 100 years or more.

I have a collection of these fine French carriage clocks, some almost 200 years old and still in good working order. Yes, some have been repaired or restored, but the basic clock is still intact!

To my surprise, I found one man and his company building clocks in America, especially carriage clocks, which were made using similar manufacturing ideas and processes that had been practiced in France for more than 50 years. This piqued my interest to do extensive research into Joseph Henry Eastman and the companies he was involved with, particularly the Harvard Clock Company (1880-1884), and the Boston Clock Company (1884-1894). The clocks made by these companies were made to last a lifetime.

“My research led me to title my lecture “American Carriage Clocks – Trash or Treasure”.

It would be impossible to discuss the best carriage clocks made in America without giving tribute to Joseph Henry Eastman (9/10/1843 – 12/17/1931). He lived his entire life in the greater Boston area. In the 1870 census he is listed as a watchmaker by trade and probably trained and was employed by the E. Howard Company of Boston, a watch & clock maker. But the early E. Howard Company records, which could have proven this fact, were lost in a fire. To learn more about the life of Joseph Henry Eastman refer to my article in the NAWCC Bulletin of November/December 2013, NO. 406, which is a biography titled, “Joseph Henry Eastman, The Watchmaker, the Clockmaker, the Man”.

THE HARVARD CLOCK COMPANY 11-20-1880 to 5-19-1884

In 1880, at the age of 37, Eastman was one of 4 men who started the Harvard Clock Co. He was good at designing high quality clocks. Though trained as a watchmaker, no watches have been found signed by him.

Eastman was known to be a founder, partner, or employee of 8 clock companies with 9 different names. The most notable was The Boston Clock Company, which began as the Harvard Clock Company chartered on November 20, 1880, located at 147 Columbus Ave., Chelsea, MA. Which is now a part of Boston.

The Harvard Clock Company made only about 800 clocks which bear the name “Harvard Clock Co.” Probably less than 100 of the Series #5 carriage clocks were made and very few have survived. These carriage clocks were high quality, 8-day movements and all were time only. They have 3 gold gilded plates, and some have nicked plates, and damascene finished back plates, which can be admired thru a beveled glass back door. All known Harvard carriage clock movements have 11 jewels with a compensated fine watch escapement.



Harvard carriage clock, SN 551, c. 1882, 11 jewel movement
7”h x 3-7/8” w x 3-1/2” d



Back view SN 550 & SN 551
nickel damascene back plate,
glass back door



Harvard carriage clock SN 550, c. 1882, full porcelain dial face.
7”h x 3-7/8” w x 3-1/2” d
Photo courtesy Jim Dyson



Harvard “Queen Anne” carriage clock SN 590, c. 1884
no bottom skirt
6-1/2”h x 3-3/4” w x 3-3/4” d
Photo courtesy Jim Dyson

The carriage clocks cases were made of heavy solid brass, polished and gold plated. They have beveled glass on 4 sides and a porcelain dial. This construction sets these carriage clocks apart from the typical carriage clocks mass-produced in America by most of the other clock manufacturers at that time, whose main concern was to produce and sell carriage clocks cheaper than those being imported from France.

I specialize in carriage clocks but below are some examples of other clock styles made by the Harvard Clock Company. They made marine clocks, banjo clocks, shelf clocks in marble, oakwood and metal cases, and bank vault timing devices.



Harvard shelf clock SN 1186, c.1882
Damascene back plate. Heavily influenced the “Queen Anne” carriage clock
11-3/8”h x 7” w x 4-9/16” d



Harvard large shelf clock, “Lattice” SN 1031 c. 1882
large porcelain dial w/window to view escapement
Photo courtesy Jim Dyson



Harvard marine clock SN 1054 c. 1882
6-3/4” diameter
Silvered dial w/view window
Photo courtesy Jim Dyson



Harvard 8-day movement from marine clock
Damascene nicked plates
Movement is the same as in the shelf clocks.
Photo courtesv Jim Dvson

There is an on-line clock museum that catalogs all types of clocks made by the Harvard Clock Co. as well American clock manufacturing companies during the 19th and 20th centuries. This on-line clock museum (www.chelseaclockmuseum.com) is owned and operated by NAWCC member James (Jim) Dyson, it’s founder and curator. This website is a wealth of information for anyone looking for research on any clock you may own made by the above clock companies. Jim also invites you to register any Harvard clock you may own as well as clocks made by any of the companies mentioned above.

THE BOSTON CLOCK COMPANY 5-19-1884 to 1-19-1894

For unknown reasons Harvard Clock Company changed its name to Boston Clock Company on May 19, 1884, but remained at the same address. The name changed, but their commitment to producing high quality carriage clocks, as well as other styles of clocks, remained the same.

The following words are from Boston Clock Co. only sales catalog published in 1890 by Smith & Patterson, Boston, their New England Agent.

*“The clocks manufactured by this company have the best and finest movements ever made, and they are unequalled in workmanship and finish.
All the movements are eight-day jeweled, and fitted with a fine watch escapement.
They are SUPERIOR and RELIABLE TIMEKEEPERS. Will run correctly in any position.
The most sensitive person will not be disturbed by the ticking, which is noiseless.
The travelling clocks in fine gilt cases, are made in “time” also with half hour strike on Cathedral Bell, and are furnished with travelling cases.
The Striking Movements are arranged for removing the Springs without taking Movement apart, and, by a simple device, the winding is done with the key placed on a single arbor for both the time and striking springs.”*

The company also had licensed agents in other cities; Wm. H. Atwater in New York, G. S. Lovell & Co. in Philadelphia, and Smith & Patterson in Boston. These same agents probably were sales agents during the Harvard years as well. A hint of this fact is the catalog cover shows the words “Established 1880”, the year Harvard was established.

It is not known if the Philadelphia agent was responsible for the private label sales to J. E. Caldwell & Co., a Philadelphia retail company established in 1858 that is still in existence today. The name J. E. Caldwell & Co. is imprinted on the dial of some Boston clocks.

Boston Clock Company’s sales catalog, printed in 1890, offered only 5 carriage clocks and many other styles of clocks including ships bell clocks, crystal regulators, a locomotive clock, and mantel clocks.



Boston “Sparta”
SN 914, c. 1885
Dial marked with retailer name,
“J.E. Caldwell”
6-1/2”h x 3-3/4w x 3-3/4” d

Boston “Sparta”
Back view. American case, beveled glass 4 sides
7 jewel 8-day movement.
Case & movement gold gilded

Boston “Sparta”
SN 2308, c. 1887
Gold mask w/2-1/2”
porcelain chapter ring.
Unusual numerals
6-1/2”h x 3-3/4” w x 3-3/4” d

Boston “Sparta”
Back view.
American case w/ typical ribbed handle. 7 jewel 8-day movement.

Some of their carriage clocks were sold in cases which were imported from France. The “tell-tell” signs of this is these cases have an escapement viewing window on the top, as was necessary in most French made carriage clocks to see if the escapement was working. This is completely not necessary on Harvard or Boston carriage clocks as the escapement is mounted vertically on a sub plate and can be viewed through the back door glass. Also, these French made cases were assembled with pre-metric screws rather than American Standard screws found in cases produced in America.

The 1890 catalog shows a “Delos” model with the top window. Also available was the American version with a different handle and no top window. This clock also came with a choice of a dial with Roman numerals or Arabic numerals.



Boston “Delos” Style 3
 SN 4062 c.1890-1892
 American case, gold mask dial,
 2” porcelain chapter ring, Arabic
 numerals, beveled glass 4 sides



Back View Style 2 & Style 3
 Movement has 3 gold gilded plates,
 7 jewel movement,
 vertical mounted escapement,
 6-1/2”h x 3-1/4” w x 3-1/4” d



Boston “Delos” Style 2
 SN 3982, c. 1890-1892
 American case, full porcelain dial,
 Roman numerals
 6-1/2”h x 3-1/4” w x 3-1/4” d



Boston “Delos” Style 1
 SN 2873 c. 1885-1890
 French case, gold plated, beveled glass
 top oval & 4 sides, gold dial mask



Back View Style 1
 8-day time only, 7 jewel movement,
 same as Delos Style 1 & 2.
 6-1/2”h x 3-3/8” w x 2-1/8” d

Another clock with a very high-quality French case is Serial No. 1337. It is the same style movement as Boston Sparta (marked J.E. Caldwell), but with the upgrade damascene nicked plates. This clock is not a marriage as it is mounted in the case in a fashion found only on Boston carriage clocks. There are no extra holes in the case and the face false plate is an exact fit to the movement. This is an early production movement, circa 1885, but strangely enough it is not marked Boston Clock Co., or Harvard Clock Co. It possibly was made as an experiment that would have been too costly to make due to its very expensive multi-piece case.

Cases very similar to this case were used by French clockmakers Drocourt and Oudin-Charpentier. Research shows these French clocks were made in the same time period as clock Serial No. 1337.



Boston SN1337 c. 1884-1885
 Fancy, French made case. Gold mask face,
 Pierced gold insert on 4 sides, top & bottom.
 1-5/8" diameter porcelain chapter ring,
 gold rosette center, spade hands, Arabic numerals,



Boston (Fancy Case) Back View SN 1337
 Nickered damascene plates, 11 jewel movement,
 compensated escapement, vertically mounted.
 Bun feet, glass on 4 sides and top.
 6-5/8"h x 3-5/16" w x 3" d

In the early years, 1884-1893, some of the Boston carriage clocks were available with upgraded 11 jewel movements and nickered damascene plates. However, the base price model had 7 jewels and gold gilded plates. All models had gold gilded cases. There were four "time only" models and one "time strike" model available in 1890. Boston Clock Company was still using some French made cases, as well as American made cases.

There is a discrepancy in the price list furnished with the 1890 catalog. The catalog shows pictures and descriptions of models "Athens" and "Delos", but the price list does not list them. The price list shows:

"8-day, companion, time, No 2 ----- \$20.00"
"8-day, companion, time, English style ----- \$20.00"

It is probable these descriptions could be meant to be for "Delos" with French case as it shows "No. 2", and Delos No. 3 could have been the American case? Possibly the one referred to as 8-day companion, time, English style could have been meant for Athens?

The other Boston carriage clock, made in time only movement and featured in the 1890 catalog, was "Athens", which probably was in production as early as 1888. I am not sure if it was available in more than one variation as the only Athens I own or have seen is the 7 jewel "time only" 8-day movement pictured here.



Boston "Athens"
 SN 3588 c. 1890-1893
 Porcelain dial, Arabic numerals,
 Dial marked "Boston Clock Co."
 Square decorated columns,
 Case gold plated w/beveled glass
 on 3 sides and back door, solid top.

"Athens" back view.
 8-day time only movement same as
 all 7 jewel Boston models.
 6-1/2"h x 3-1/4" w x 3-1/4" d



The ever popular “Queen Anne”, a very fancy case with at least four variations, was in production from the “Harvard days” until the end of production, probably late 1893. The early model has a solid back door making it necessary to open the door to see if it is working.



EARLY STYLE Boston “Queen Anne”
 SN 983 c. 1884-1885
 Almost same as Harvard model.
 American case, gold dial mask, Roman numerals, ribbed handle, beveled glass 3 sides, solid back door, solid side chair trim, no base skirt.



Early “Queen Anne” back view.
 8-day time only movement same as all 7 jewel Boston models.
 6-1/8”h x 3-3/16” w x 2-5/8” d



LATE STYLE Boston “Queen Anne”
 SN 3397 c. 1890 -1893
 Gold plated, gold dial mask, modern Arabic numerals, open side chair trim, skirted base, beveled glass on back door



Late “Queen Anne” back view
 Same 7 jewel, 3 plate, 8-day movement as pictured in 1890 catalog.
 6-1/2”h x 3-1/4” w x 3-1/4” d

All Boston time only models sold for \$20.00 each, or today's equivalent of \$623.00.

The model “Cypress” was the most expensive carriage clock, offered in the 1890 catalog for \$37.50. While this sounds cheap, it was not. In today’s dollar that would be a whopping cost \$1,168.25. Inflation has taken its toll over the past 132 years. Or you could say in old folks’ terms, “A dollar *aint* what it used to be”. This clock was not made for the ordinary worker.

It was somewhat a status symbol to own one of these carriage clocks, as well as the many other mantel clocks made by The Boston Clock Company. These clocks ran for 8 days, unlike most American pocket watches, which had to be wound every day! Some of the more expensive clocks struck the time on a cathedral gong.

Yes, Boston carriage clocks were more expensive than many other American made carriage clocks of the time, but as always, “you got what you paid for”. Most carriage clocks made by other American clock companies were cheaply made and cheaply priced. Many of these were exported to Europe and helped cause French clockmakers to cheapen their quality to be competitive with American made clocks in the late 1890s and beyond. I will save this story for another time.

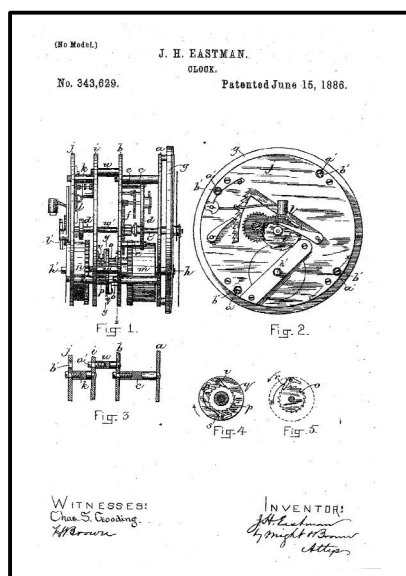
THE TANDEM WIND CLOCKS

Many of the carriage clocks imported from France and England had the very useful feature of striking on a spiral gong to signal the hour and half-hour. Some would repeat the strike by pressing a button on the clock. These carriage clocks are referred to as “repeaters”. This was an important feature before electric lighting was widely available, as the owner could “hear” the time, eliminating the need to light a candle or oil lamp at night. This feature made European, mostly French made, clocks very desirable to those who could afford them.

I’m sure this is the main reason Joseph Eastman felt the need to invent a striking model clock in an effort to compete for this segment of the market.

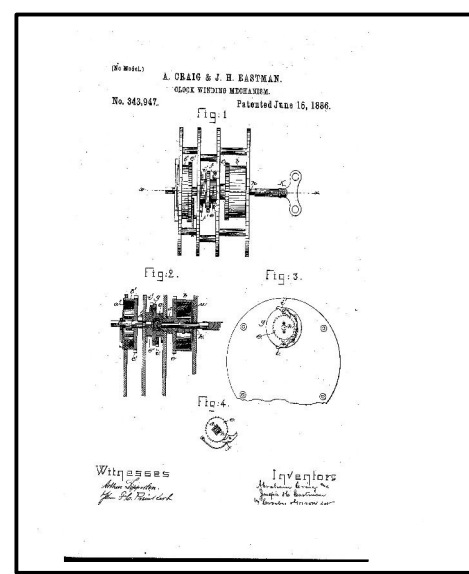
On June 15, 1886, Joseph Eastman, co-founder, and General Manager of Boston Clock Company, was granted patent #343,947 for a striking movement. This movement has round plates which indicates the main use of this was for mantel clocks which were the greatest seller for the Boston Clock Company. The Boston Clock Company never used the term “tandem wind”. They only referred to it as an “8-day striking movement”.

Another patent #343,629 shows how the plates are dissembled to let down the main springs in tandem wind clocks. “Cypress”, is their only carriage clock with the tandem wind movement. This movement is wound from the back of the clock rather than the face of the clock as was required in the mantel clocks and ships bell clocks. This movement allowed time and strike spring barrels to be wound with a single winding square. It has an hour/half hour strike on a gong. This patent credits Abraham Craig and Joseph H. Eastman as the inventors.



Patent #343,629
dated June 15, 1886
Shows part which allows
separate let-down of
main springs.
Note: Why is this patent
number lower than the
main movement?

Patent # 343-947
Dated June 15, 1886
Clock winding mechanism. This
is the first “tandem wind”
movement patented in America.
There are 2 other later tandem
wind patents in Europe



Because of its unique movement, the only carriage clock with the tandem wind movement, “Cyprus”, was given a separate set of serial numbers. About 600 of this model were produced.

The Cyprus model came in at least four different case styles. Some cases were made in the United States and had no top window and a ribbed handle same as other Boston carriage clocks. Others had a case imported from France with a top window, metric screws, and an octagon sectional handle similar to those found on many French production carriage clocks. Some movements also had a damascened backplate, while other Cyprus models had a sculpted backplate. The Cyprus case is taller, wider, and deeper than any of the time only model carriage clocks made by Boston Clock Company, thus accommodating the much larger tandem wind movement.



EARLY Boston "Cyprus"
 SN D-170 c. 1886
French case. gold plated, full porcelain dial, Arabic numerals, French handle, beveled glass 4 sides & oval top glass, 7-1/8"h x 3-5/8" w x 3-1/4" d

"Cyprus" back view
 Sculpted back plate.
 All plates are gold gilded.
 8-day movement, time & strike on a gong which is mounted on the back plate. 7 jewels, compensated escapement, single winding square

Boston "Cyprus"
 SN 288 c. 1887-1890
American case – no top window.
 Gold plated, full porcelain dial, Roman numerals, flat top, ribbed handle, beveled glass 3 sides & back door. 7"h x 3-3/4" w x 3-1/2" d

The tandem wind movement was also used in crystal regulators, ships bell clocks, and some other wall and mantel clocks, which were wound from the front, unlike the Cyprus model. Alhambra, pictured below, was their most expensive model, \$133.50 in their 1890 catalog, \$4,158.53 in today's dollars.



Boston Regulator "Crystal"
 SN 12912 c. 1890-1893
 Large, gold-plated shelf clock, beveled glass sides & doors. 4" diameter dial, pale yellow w/ white cartouches & black fancy Arabic

Boston "Crystal" back view
 Gong holder mounted on pedestal. Tandem wind movement mounted from the top and wound from the front. 8-day, 7 jewel. 9-1/4"h x 6-1/2" w x 5" d

Boston "Alhambra" c. 1890 – 1893
 Gold plated case. Tandem-wind, 11 jewel, 8-day movement, nicked damascene plates, 13-1/2"h x 13-1/2" base.
Photo courtesy of Jim Dyson

The tandem wind time and strike clocks gave a boost to sales. About 14,000 clocks were made and sold over the next few years. But it was not enough to save the company as its assets were sold to the Ansonia Clock Company on January 19th, 1894.

EASTMAN CLOCK COMPANY 3-13-1894 to 10-29-1896

The Eastman Clock Company was first located at 64 Warren Ave., Roxbury, MA. The company then moved to a new brick building located at 284 Everett Ave., Chelsea, MA.

The company was deep in debt as early as April 1, 1896, with final bankruptcy occurring October 29, 1896.

The Eastman Clock Company operated approximately 2 years and 8 months between the 2 locations producing an unknown number of marine clocks, banjo clocks and weight-driven wall regulators. Sadly, no carriage clocks have been found which can be attributed to this company.

The "Jeweler's Circular & Horological Review", a Boston publication which kept the New England clock and watch manufacturers and retailers informed about the happenings in their industry, reported the following information on August 1, 1894.

"THE EASTMAN CLOCK CO. OBTAIN A FLATTERING CONTRACT" "Boston, Mass., July 25,. – The Treasury Department has recently awarded the contract for supplying the United States buildings east of the Rocky Mountains, with clocks, to the Eastman Clock Co. of this city. The contract expires June 30, 1895"

I assume this would be United States Post Offices and all United States government buildings. This would have been a lot of clocks pre-sold to the government.

On September 10, 1894 the "Jeweler's Circular" gave the following report:

"THE EASTMAN CLOCK CO. TO HAVE A LARGE PLANT IN MELROSE, MASS."
"Melrose, Mass.,
Sept. 10 – The concern known as the Eastman Clock Co., whose works are now located at Roxbury, is about to remove to this place, citizens of Melrose having subscribed \$13,000 for stock to increase the output of the plant. The capital is now \$25,000. The factory will be erected on Swains Pond Ave."

There is no evidence this factory was ever built. What happened? This contract could have saved the company. I have never seen a clock made by Eastman Clock Company which was marked "U. S. Government property", which I'm sure it would have been if purchased and used in a post office. If anyone knows of such a clock, I would like to hear about it.

The contract would have expired on June 30, 1895, which was before the start of the 284 Everett Ave. factory in Chelsea, MA.

(The New) BOSTON CLOCK COMPANY 10-30-1896 to 8-4-1897

Harry W. Bates and investors chartered a company in Kittery, Maine on October 7, 1896, but could not occupy the 284 Everett Ave building in Chelsea, MA, the building previously purchased from the bank, until Eastman Clock Company's bankruptcy was final on October 30, 1896. It is reported there was no production until November 11, 1896.

Bates was not a clockmaker, just a businessman. Assuming they could hire workers to run the production, this company possibly operated 7 months. There is some proof production was started in November 1896. It is known there were some clocks finished in these few working days before all assets and the building was acquired by Charles Pearson on August 4, 1897, reportedly to settle a debt owed by H. W. Bates. The new name of the company owned by Pearson was "Chelsea Clock Company."

CHELSEA CLOCK COMPANY 8-4-1897 to Present

The new Chelsea Clock Company took over operations in the factory at 284 Everett Ave., Chelsea, MA. In the first few months of operation some of the clocks made by the (new) Boston Clock Company were finished but the name Boston Clock Company was milled off and re-remarked Chelsea Clock Company. These clocks are almost identical to the “Delos” model made by the original Boston Clock Company, which ended production in late 1893.

Chelsea’s carriage clocks started with Serial No. 2799, and this first carriage clock was reportedly kept in Pearson’s office for many years. The fate of this carriage clock is not known. Possibly it was lost in the fire at the company several years later. I do have one of these remarked carriage clocks, Serial No. 2854 pictured below. It is unknown how many of these carriage clocks were completed and remarked, but no less than 55 as proved by serial number count.

A new series of carriage clocks with the Model #188-D, starting with Serial No. 3000, was put into production. Below is an example of this Model number, Serial No. 3005. This model is pictured in Chelsea’s first catalog.



Chelsea (new Boston)
SN 2854 c. 1897
American case.
Full ivory-like dial, spade hands, polished brass, lacquered finish, beveled glass on 4 sides.

Chelsea (new Boston)
Remarked back view. Shows original name circular milled off. 8-day, 7 jewel movement same as most movements from original Boston Clock Co. 6”h x 3” w x 2-5/8” d.

Chelsea model 188-D
SN 3005 c. 1899-1906
New style is shorter. Gold mask, large porcelain chapter ring w/ blue Arabic numerals & Breguet hands, beveled glass on 4 sides.

Chelsea 188-D back view
8-day movement is same design as Boston Clock Co. The plates are wider to fit new style case. 5-1/2h x 3-7/8” w x 2-3/8d

FAIR HAVEN MANUFACTURING COMPANY December 1896 to February 1898

Eastman did not give up on his desire to manufacture high-quality clocks. At the age of 53, his next venture was to partner with Nahum J. Busby of the Busby Bell & Tool Company of Fair Haven, VT. To form the Fair Haven Manufacturing Co. This merger was reported in the “Jewelers’ Circular & Horological Review” in the December 16, 1896 publication

Prior to the formation of the Fair Haven Manufacturing Company, Nahum J. Busby, the general manager of the Busby Bell & Tool Company, demanded the company pay him \$50,000 for the machinery and tooling he brought from Boston. The board refused and voted to remove him as general manager. Busby left Fair Haven with the statement, “I will see you in court”, and returned to Boston.

Busby filed a lawsuit for \$50,000. During this period the Vermont Record, a Fair Haven, VT newspaper published a running account of a court battle for control of the Busby Bell & Tool Co. between Nahum J. Busby, N. R. Reed, and other officers of the company. This lawsuit was reported in the New York Herald on Friday, January 1, 1897. No court ruling on this lawsuit has been found, so we can assume it was settled out of court.

The documents recorded in Montpelier, VT, the Vermont state capital, show that the official name change from the Busby Bell & Tool Co. to the Vermont Clock Company occurred February 15, 1898. The name change was by vote of the current Board of Directors of the Busby Bell & Tool Co. The list of board members did not include the names of Nahum J. Busby or Joseph H. Eastman.

There was no mention of the interim named company, Fair Haven Manufacturing Company. Therefore, we must assume Fair Haven Manufacturing Company, while it did exist, was never incorporated in the State of Vermont. The company did produce at least 2 models of carriage clocks, also some other styles of clocks. Their total production is not known.



Fair Haven Mfg. Co. Style 1
No Serial # c. 1897
American case, gold plated,
ivory-like porcelain dial
similar to Boston Delos,
beveled glass 4 sides.

Fair Haven Style 1
Back View
8-day time only, 7 jewel
movement w/ nickeled
damascene back plate
6"h x 3" w x 2-3/4" d

Fair Haven Mfg., Style 2
No Serial # c. 1897
American case is same as
Style #1 except dial is white
porcelain w/ Arabic
numerals.

Fair Haven Style 2 Back
All plates are nickeled.
Movement is the same as
style 1 except the
damascene pattern is
different.

FAIRHAVEN CLOCK COMPANY / VERMONT CLOCK COMPANY February 1898 to 1901

After Busby Bell & Tool company changed to the name Vermont Clock Company, Eastman continued as the production manager.

The company published their only catalog in 1900 which shows two time only carriage clocks. The catalog also shows 3 crystal regulators. One appears to be a tandem wind, time & strike. The other two are time & strike with two spring barrels wound separately.

The catalog did not offer a striking two-barrel carriage clock like the one pictured on page 12. This clock was made sometime after the catalog was printed. This clock is very rare as I'm aware of only 3 in existence today. I own one and I have seen only two others. The catalog offers several other styles including a ships bell clock and a marine clock as pictured on page 15.



Vermont Model #2
 No Serial #, c. 1900-1901
 Case gold plated on brass,
 beveled glass 4 sides, gilded
 gold mask w/ 2-1/4"
 porcelain dial ring
 similar to Boston "Delos"

Vermont #2
 back view
 8-day time only,
 7 jewel movement w/
 Compensated
 escapement
 6"h x 3" w x 2-3/4" d

Vermont– Large carriage clock
 No Serial # c. 1901-1902
 Case gold plated, beveled glass
 4 sides, top engraved
 "Feby – 10-23-1903",
 porcelain dial, Arabic
 numerals,

Large Vermont – back view
 8-day movement, time &
 strike on a gong, 2 winding
 squares, 3 nickeled plates,
 compensated escapement
 marked "Vermont Clock Co."
 7-1/8"h x 4-3/8" w x 3-1/2" d



Vermont
 movement for 5"
 Ships Bell Clock
*Photo courtesy
 Jim Dyson*

Vermont 5" Ship's Bell Clock
 c. 1901
 2- winding squares, silvered dial,
 Breguet hands
Photo courtesy Jim Dyson

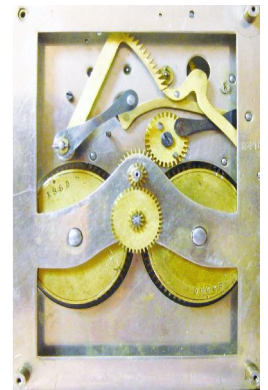
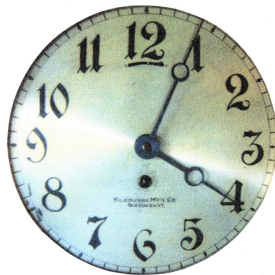
Vermont 5" Marine Clock
 Movement
 Damascus back plate
 3 nickeled plates,
 Photo courtesy Jim Dyson



Vermont 5" Marine Clock
 C. 1900
 Silvered dial,
 Polished brass case
Photo courtesy Jim Dyson

VERMONT CLOCK COMPANY / KILBOURNE MFG. CO. OF FAIR HAVEN, VT. 1901-1902

The Vermont Clock Company's name and assets were sold to Kilbourne Manufacturing Co., headed by Charles Kilbourne, on May 18, 1901. After the sale, clocks were still marked with the names, Vermont Clock Co. or Kilbourne Manufacturing Co. The companies, under all 3 names, were moderately successful and produced approximately 3,000 clocks between 1898 and 1902. The company ceased all manufacturing of clocks in 1902.



<p>Vermont Clock Co. 5" Ships Bell Clock c. 1901 Dial marked "McMillan Patent" Probably Eastman tandem-wind movement w/McMillan patented improvement. <i>Photo courtesy Jim Dyson</i></p>	<p>Dial for 5" Ships Bell clock Dial marked "Kilbourne Mfg. Co." c. 1901 Probably Eastman tandem-wind movement. <i>Photo courtesy Roger Conner</i></p>	<p>Kilbourn Mfg. Co. 5" Ships Bell Clock c. 1901 Time and strike Dial marked "McMillan Patent" 2 side by side spring barrels <i>Photo courtesy Roger Conner</i></p>	<p>Vermont Clock Co. Carriage clock movement c. 1901 time & strike Probably McMillan patented movement. 2 side by side spring barrels</p>
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All 3 companies, Fair Haven Clock Co., Vermont Clock Co., & Kilbourne Mfg. Co. operated in the same building located in Fair Haven, VT. Even after Charles Kilbourne purchased the assets of Vermont Clock Co., he continued to use the name "Vermont Clock Co." as well the name "Kilbourne Mfg. Co. Kilbourne Mfg. Co. had previously been a wire manufacturing company.

Apparently, Joseph Eastman was still involved in the company after Charles Kilbourne took over the Vermont Clock Co. A good testament of this is the fact that the Eastman patented tandem-wind movement was still being used in some of the clocks.

The clocks marked "McMillan Patent" most likely used the improved movement patented by McMillan in January 1901. This patent #664,886, offered an improvement to Eastman's tandem-wind movement. This patent enabled silent strikes, creating a true "ships bell" clock, which allowed for the changing of the watch. The movement in the Vermont carriage clock pictured above allows for a simple time striking of the hour and half-hour. It is likely that George D. McMillan designed the side-by-side spring barrel movement in the above pictured carriage clock movement; however, there are no markings on the movement to prove this fact.

The companies ceased operations in 1902, and Hershede Clock Company purchased the assets and un-completed clocks from Charles Kilbourne. The building was leased to other tenants in 1903.

It is speculated that Joseph Eastman continued working for Hershede Clock Company as an independent contractor, completing clocks and movements. Clocks have appeared for sale by Hershede Clock Company, marked "Vermont Clock Company" as late as 1907.

It is possible some clock movements used in Eastman's next company, the Little & Eastman Clock Company (1904-1908), were purchased from the defunct Vermont Clock Company & Kilbourne Mfg. Co prior to Hershedes' acquisition.

Vermont Clock Co. was the last company associated with Joseph Eastman to manufacture a carriage clock. However, Eastman continued to found or partner in four more clock companies, none of which manufactured a carriage clock. These companies were:

Little & Eastman Company 1915 - 1918	1904 – 1908	Second Eastman Clock Company, Inc.
Derry Manufacturing Company 1920 - 1921	1908 – 1910	E & O Clock Company

SUMMATION

Since the early 1800s hundreds of clock and watch manufacturing companies in America have come and gone. Only 3 companies have survived to this day; Chelsea Clock Company, Waterbury Clock Company (now Timex), and Seth Thomas Clock Company.

Chelsea Clock Company, located in Chelsea, MA. is the only clock company still manufacturing a limited number of complete clocks with American movements. Most of their clock have movements made in Germany.

Waterbury Clock Company, evolved and remade itself into the largest watch company in the world, Timex World Wide. Timex is headquartered in America but no watches made by Timex are made in America.

Seth Thomas Clock Company is a very old name in American clocks, but there are no Seth Thomas clocks made in America.

But, there is some good news. Wristwatches are having a resurgence in popularity. There are several small factories now in existence in America making solar, self-winding, and other multi-function wristwatches. So, maybe the art of watch making is not dead in America.

While carriage clocks are no longer made in America, they were popular for over 125 years, and do have a place in timekeeping history. Some are now valuable and rare antiques because of their quality and beauty. Carriage clocks made by Harvard Clock Company, Boston Clock Company, Chelsea Clock Company, Fair Haven and Vermont Clock Company are timepieces to be collected and respected for their beauty and quality. They are some of the best carriage clocks made in America.

I hope you have found this story enlightening and informative.

ACKNOWLEDGEMENT

THANK YOU:

Beauton, my wife, for the many hours and computer graphics required to make this article possible.

Jim Dyson, Chelsea Clock Museum curator and researcher for his information and photos.

Daniel Roberts, volunteer with Fair Haven Historical Society.

Roger Conner (deceased) a collector, researcher, and restorer.

Information from public sources: Boston City Directories

U. S. Census Reports

Jeweler's Circular &

Horological Review

The Record, a Fair Haven,

VT newspaper

Pierre Millot Bell Strike Grand Sonnerie French Carriage Clock Lester M. McAlister (USA).



Figure 1.

One evening as I was searching Carriage Clock listings on eBay, I discovered a very unique bell strike Grande Sonnerie clock. Also noted was that the clock had a very unique balance platform. The balance wheel was impulsed by an underslung pallet fork driven by a deadbeat verge and escape wheel. This escape wheel was not powered by a standard contrate wheel, but by a gear at the end of the time train. Since the “Buy-It-Now” price was more than reasonable for a high-grade Grande Sonnerie model, I decided to take on this worthy restoration project (Fig 1).



Figure 2.

The first thing I wanted to do was to find out who originally manufactured this beautiful clock. In the lower right hand corner of the back plate were the initials P M on either side of what appeared to be an anchor (Fig 2). I looked through my trademark book, but could not find that specific trademark. I then conducted a Google search of “bell strike Grande Sonnerie carriage clock” and found a picture of another clock with identical strike system and platform. The maker of this clock was identified as Pierre Millot of Paris France. Mystery solved.

Next on the list was to disassemble the clock and determine what repairs were needed. With the discovery of bent trip pins and bar springs, I could tell that the last person inside this clock was in over their head and had no idea how this strike train operates. Luckily there were no solder repairs or permanent damage done to any part of the strike train.

Disassembly of the mainspring barrels revealed that both springs were badly “coned” from improper (inserted by hand) installation and would require replacement. The mainsprings required were not available in the US so were sourced from Cousins in the UK. Lastly there were 8 worn bushings to replace and every pivot surface in the movement required dressing and burnishing. Figure 3 shows the movement apart after cleaning. Figure 4 shows the bar springs before and after restoration.



Figure 3.



Figure 4.

The beautiful platform was next on the list. Other than needing service, the platform was in excellent condition.



Figure 5.



Figure 6.



Figure 7.



Figure 8.

Figures 5, 6 and 7 show the top, side and bottom views of the platform and Figure 8 shows the top of the verge (pallet fork) where it extends through the platform base and then contacts the roller jewel to impulse the balance wheel. A very unique design, which actually works quite well, keeping excellent time.



Figure 9.

The alarm mechanism was also different from anything experienced before (Fig 9). There was a heart shaped plate that held the setting shaft and indicator hand shaft in position. This system was much more complicated than a typical carriage clock alarm, but worked quite well and I felt allowed for a more precise setting of the alarm. I surmised that the alarm system design was credited to “AB&D” which was stamped just below the assembly. I was unable to find this trademark in my book either.



Figure 10.



Figure 11.



Figure 12.

Figures 10, 11 and 12 show back, front and side views of the movement as it went back together.



Figure 13.



Figure 14.



Figure 15.

Figures 13, 14 and 15 show 3 different views of the clock once the movement was reinstalled.

If you would like to see this clock in operation and get a more detailed explanation of the restoration please go to YouTube and search for Pierre Millot Carriage Clock.

Lester M. McAlister
Web: SangamoClocks.com
Email: TimeLester@Gmail.com

**Schmitt Horan & Co. Spring 2022 Live Auction on
Saturday June 11th & Sunday 12th 2022.**

This is reproduced from the Schmitt, Horan & Co June 2022 Catalog.

Lot 792

A GOOD 20TH CENTURY MINUTE REPEATING TRAVEL CLOCK SIGNED
SPAULDING & CO. PARIS.



Description:

Spaulding & Co., Paris, a 20th century minute repeating travel clock, with a reeded, silver gilt case, the top with large round repeat pusher, roman numeral gilt dial with blued steel hands, and 8-day movement with lever escapement, repeating the last hour, quarter, and minute on demand, contained in its original leather-covered, burgundy silk and velvet lined travel box, outer box dimensions listed.

Condition:

Case dirty and with wear to gilding, dial restored, running, repeating sometimes does not complete striking, sequence can be prompted to finish by inverting case, needs service, outer box with minor wear, lacking handle.

Dimensions: 3in x 3.375in x 2.25in

Circa: 20th C

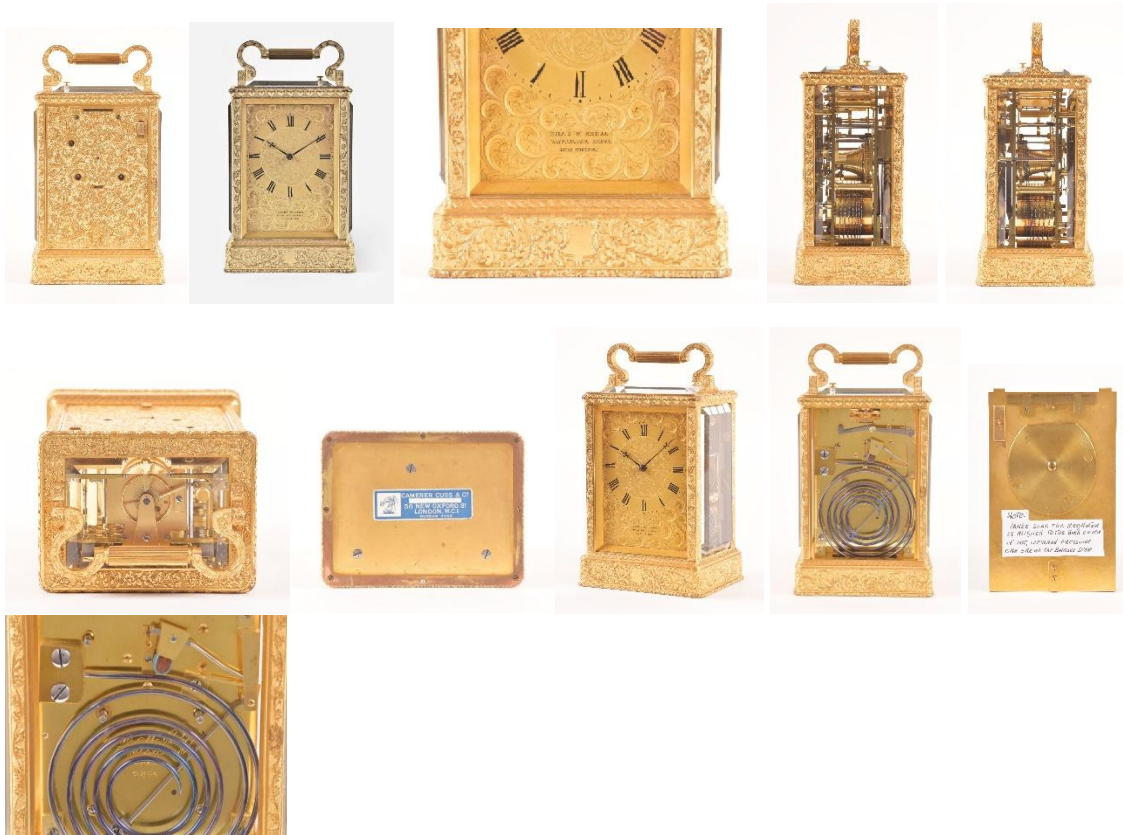
Accessories: Travel Case

Sale Price \$2400

High Estimate: \$3,000 **Low Estimate:** \$2,000

Lot 799

A FINE AND RARE MID-19TH CENTURY HOUR REPEATING CARRIAGE CLOCK
BY JAMES MCCABE



Description:

James McCabe, Royal Exchange, London, a fine and rare hour repeating carriage clock, the gilt brass case beautifully engraved with floral and foliate motifs on a matted ground, and set with four thick beveled glasses, and back with shuttered winding and setting apertures, and strike - silent slide, signed roman numeral electroformed dial with floral and foliate ornament and blued steel fleur de lys hands, signed, two train fusee movement with lever platform, striking the hours on a blued steel gong, and repeating the last hour on demand, serial #2836, the case bottom with label of Camerer, Cuss & Co.

Condition:

Case with minor dirt, glasses good, dial and hands very good, movement clean and running well, good balance amplitude, minor staining on barrels from chain lubricant, striking and repeating correctly, exterior portion of strike silent slide replaced. A very good example of the work of this eminent horological firm.

Dimensions: 4.125in x 7.5in x 3.25in

Circa: 1855

Sale Price: \$28,000

High Estimate: \$18,000 **Low Estimate:** \$14,000

Lot 800

A GOOD FRENCH CARRIAGE CLOCK WITH CHRONOMETER ESCAPEMENT
SIGNED COMMINGES PARIS.



Description:

Comminges, 62 Palais Royal, Paris, an unusual, early 19th century grand sonnerie striking carriage clock with spring detent escapement and travel case, the multi part brass case on bracket feet and with five beveled glasses, and the top with folding handle, signed, silvered roman numeral dial displaying seconds below 12:00, blued steel Breguet style hands and alarm indicator, 8 day, three train movement wound through the dial and with spring detent escapement, vertically oriented balance behind the back plate, exposing the working escapement to full view through the top glass, sounding Viennese hours and quarters on two bells, and repeating the last hour and quarter on demand, with leather bound, gilt stamped travel case, dimensions of clock listed

Condition:

Case polished and lacquered, right side glass with chips at upper corners, and small loss at lower left, top glass with minor loss at front right, hole in left side glass does not align with alarm setting square, dial resilvered, dial engraving with losses to infill, tip of hour hand broken, movement with spotting and staining, running, striking and repeating correctly, alarm train functional but sounds without regard to the position of the indicator, would benefit from service, bell stand loose, box with minor losses and scuffing to leather, right hinge detached, door missing, lining with dirt and wear.

Dimensions: 4.5in x 7.375in x 3.5in

Circa: 1820

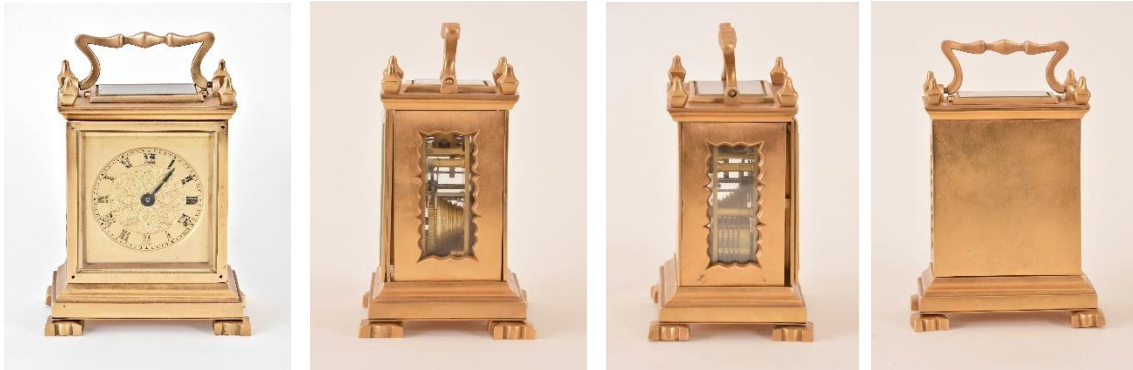
Accessories: Key Leather Carrying Case

Sale Price: \$2,200

High Estimate: \$5,000 **Low Estimate:** \$4,000

Lot 803

A MID 19TH CENTURY ENGLISH CARRIAGE CLOCK



Description:

England, a mid19th century carriage clock, the case with cavetto molded base on decorative feet, the glazed sides with cupids bow bordered, glazed apertures, and cavetto molded top with finials, folding handle, and bevelled glass panel, roman numeral gilded dial with gilt mask and engraved, rose window pattern center, and 8-day fusee movement with large lever platform and polished steel balance.

Condition:

case regilded, dirty and with minor losses to gilding, many replaced screws, front door with minor bends and lacking one screw, handle with loose fit and marring at left, side glasses replaced with double glass, dial with some losses to numerals, hour hand replaced, minute hand missing, movement running.

Dimensions: 4.5in x 6.875in x 3.25in

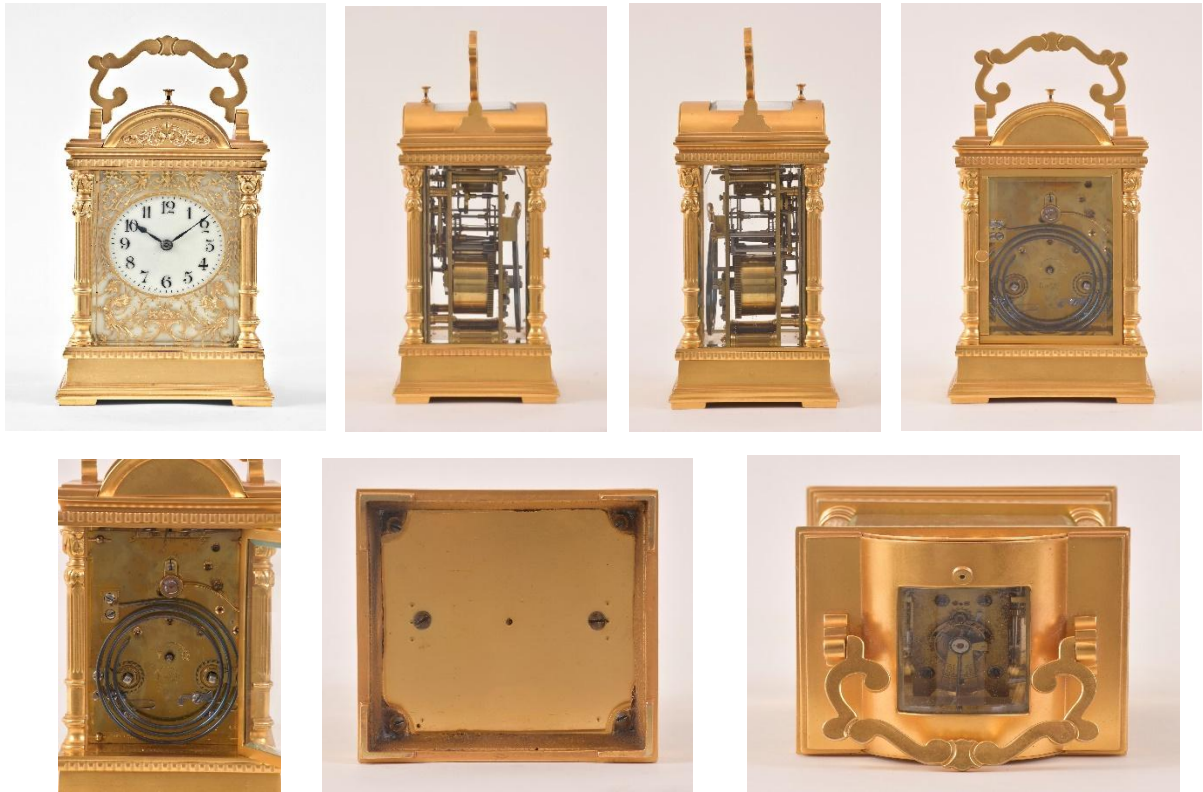
Circa: 1855

Sale Price: \$350

High Estimate: \$1,500 **Low Estimate:** \$1,000

Lot 804

AN UNUSUAL AND DECORATIVE EARLY 20TH CENTURY HOUR REPEATING CARRIAGE CLOCK.



Description:

Richard & Co., London and Paris, an unusual and decorative hour repeating carriage clock, gilt Anglaise Riche variant case with break arch top and scroll ornamented carrying handle, Arabic numeral white enamel dial with gilt and engraved fretted mask featuring trailing vines and foliage, dragons, and basket of fruit, blued steel hands, and signed, 8 day, two train movement with lever platform, striking on a gong and repeating the last hour on demand.

Condition:

Gilding restored, and with minor losses and dirt, front glass with minor chip at lower right, rear glass with small chip at bottom edge, dial, mask and hands good, movement running, very low balance amplitude, striking and repeating functional, movement very oily, needs service.

Dimensions: 4.125in x 6.625in x 3.75in

Circa: 1900

Sale Price: \$350

High Estimate: \$1,500 **Low Estimate:** \$1,000

Lot 805

A LATE 19TH CENTURY MINIATURE CARYATIDES CARRIAGE CLOCK SIGNED LEROY ET FILS.



Description:

LeRoy & Fils, Paris, a miniature Caryatides style carriage clock, the silvered case with caryatid corners, masks and detailed foliate ornament, case top with addorsed serpent handle, and beveled glass allowing observation of the oscillating balance, arabic numeral white enamel dial with plum colored steel hands, and 8 day timepiece movement with lever platform, the case bottom signed "LeRoy et Fils 13 - 15 Palais Royal Paris".

Condition:

Case with polish residue and minor losses to silver, top glass with chip at rear right corner, dial with minor scratches and losses to signature, hands good, not running, good staff, needs service.

Dimensions: 1.75in x 3.375in x 1.5in.

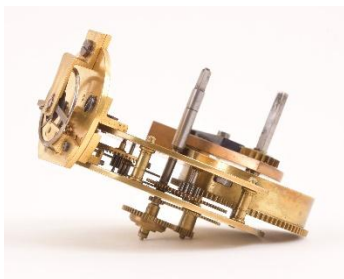
Circa: 1880.

Sale Price: \$1,400

High Estimate: \$1,300 **Low Estimate:** \$900

Lot 806

AN INTERESTING MID 19TH CENTURY ENGLISH CARRIAGE CLOCK WITH ENGRAVED CASE



Description:

England, an interesting mid-19th century carriage clock, the cast, gilt case with foliate engraving and decorative tapered feet, the top with fixed handle and round, glazed aperture with concentric regulator, Roman numeral white enamel dial with blued steel Breguet style hands, and 8-day timepiece movement with going barrel and lever platform with polished steel balance

Condition:

Case dirty and with some wear to gilding, the dial appears to be an early, purpose made replacement, enamel with cracks and minor chipping at the edge above 10:00 and 1:00, staff good, will run briefly, needs service.

Dimensions: 3.25in x 5.5in x 2.5in

Circa: 1850

Sale Price: \$350

High Estimate: \$900 **Low Estimate:** \$700

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 the 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:

Tom Wotruba: (USA) twotruba@sdsu.edu

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

Ken Hogwood: (USA) kenhogwood@aol.com

Leigh Extence: (UK) leigh@extence.co.uk

Greg Cook (USA) gcookie16@yahoo.com

Link to the 1stdibs website:

<https://www.1stdibs.com/search/?q=carriage%20clocks>