

“The Carriage Way”



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A Strut Clock by Thomas Cole

President's Report



Stan Boyatzis

Welcome to the Chapter 195 newsletter. A special welcome to all our new members. At present, membership stands at 129. Membership is slowly climbing and I encourage current members to spread the word about Chapter 195 and invite friends with an interest in carriage clocks to join. The feature article in our newsletter is on an unusual Thomas Cole Strut Clock by Tom Wotruba. Tom has thoroughly researched this clock and the article again should stimulate a great deal of interest and debate. Tom will welcome any queries from the membership.

Peter Ekins has included a short article on a Thomas Cole ornate watch stand in the form of a carriage clock.

Doug Minty has contributed to the hint section with a useful article on 'Blueing'.

Remember, this is your newsletter so if you have any helpful hints to share with the membership, please email our Secretary to include this in our newsletter.

As we grow, we will be able to entertain, educate and encourage the membership with our special interest in carriage clocks. To achieve this, we need your contribution.

Marcus Harris from National Headquarters has set up our website. Copies of previous newsletters, hints and a question page are included.

I again have included a link to the Online Galleries website. This is the site I use frequently 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 Strut Clock by Thomas Cole

Tom Wotruba

Introduction

A somewhat unique member of the carriage clock family is the strut clock made famous by Thomas Cole. This article is about one example of a Cole strut clock, a rather distinctive example at that, and a strut clock with a bit of a mystery attached. Figure 1 presents our ultimate focus of attention, following a summary of what it is that Cole's strut clocks are all about.



Figure 1. Strut clock, case, and key by Thomas Cole. Height to top of coronet is 5 ½ inches.

Thomas Cole made several types of clocks besides strut clocks, including mantel, tripod, compendium, and inkstand clocks. And in working together with his famous brother James Ferguson Cole (sometimes called “The English Breguet”), some fine examples of the more typical carriage clock design were created. But it is the strut clock that distinguishes the reputation of Thomas Cole.

Background

A brief background of this clockmaker is as follows.¹ Thomas Cole was born in 1800 in Somerset, England, about two years after James Ferguson Cole. The brothers worked together from about 1825 to 1829, then went their separate ways. Thomas went to work for James McCabe until about 1874, after which he set out on his own, describing himself as “a designer and maker of ornamental clocks.”² He had two sons and two daughters as did his brother. Thomas participated in the Great Exhibition of 1851 in London, presenting a display of six items including two that seemed to be strut clocks based on their catalogue description but not specifically labeled as such. Subsequently he entered the Paris Exhibition of 1855, and his obituary writer nine years later stated that “Our neighbors at the Paris Exhibition of 1855 accorded him a very distinguished position for true artistic excellence and superior workmanship.”³ He next participated in the London International Exhibition of 1862, and its official catalogue specifically noted his work, stating about Mr. Thomas Cole’s exhibition that “nothing could exceed the beauty of design and good taste of the varied models and general excellence of workmanship.”⁴ The writer of this catalogue, and one of the exhibition judges, was Charles Frodsham. Thomas Cole died in 1864 from typhoid fever.

Strut Clocks

Two basic shapes of strut clocks were produced by Thomas Cole – rectangular and oval. Typical examples of these are seen in Figures 2 and 3. The oval clocks varied in height between about three and four inches (with an occasional miniature) and were 30 hour in duration. The rectangular were made in three sizes, the most common being between five and six inches in height and were eight day in duration. But the underlying idea for both was the same. The flatness or narrow width of these clocks made them especially suitable for travel in the carriage. The shape enhanced their portability as contrasted with the more bulky shape of the regular carriage clock. They were considered carriage clocks from the outset, having handles and travel cases.

They could be made suitable for standing by means of a strut that inclined from the back or a turnbuckle foot that pivoted out from the underside of the case. We will look more at these devices when we examine the construction details of these strut clocks.

¹A more complete history and discussion of the work of Thomas Cole is found in J. B. Hawkins, *Thomas Cole & Victorian Clockmaking*, Macarthur Press, Sydney, 1975.

²Derek Roberts, *Carriage and Other Travelling Clocks*, Schiffer Publishing, Ltd., 1993.

³*Horological Journal*, vol. 6 (1864), p. 71.

⁴*International Exhibition London. Report by the Juries 1863*, Class XV, No. 3236.



Figure 2. Rectangular strut clock by Thomas Cole. About 6 inches high with calendar. (Image from Gerald March Antique Clocks)



Figure 3. Oval strut clock by Thomas Cole. About 4¾ inches high. (Image from Christies London)

How many strut clocks did Thomas Cole produce? Hawkins in his book offered some estimates based on his extensive research. First he started with the numbering system that Cole used. Cole started numbering all of his clocks at 500 in about 1846/47 and ended at about 1900 in 1864. But there were also unnumbered clocks made as many have been found (for example, the clock in Figure 1 is unnumbered). Hawkins estimated that about 200 such clocks were produced prior to 1846. In total, he estimated that about 275 oval and 300 rectangular strut clocks were made, based on the evidence he has seen. But as we shall discuss later, the numbering or lack thereof and the corresponding dates may not be exactly related.

Cases. The most distinguishing feature of Cole's strut clock cases is that they are based on a central casting using a lost wax process. As a result, no two cases are exactly the same. A typical strut clock case involves multiple layers of construction each cast separately. Starting from the front, there are typically four layers – the front bezel, a decorative dial cover, and a depth piece to anchor the dial glass. Behind these is found the dial and all of these attach to the cast central body that carries the feet and handle. From the back there are usually three layers of back cover to provide enough depth for the movement and also to provide the foundation for the back strut as well as for the shutter door that opens to expose the escapement. Handles are also worth noting. Most strut clocks use the ring-shaped handle while the clock in Figure 1 employs a folding two-part handle, somewhat unique among Cole's creations.

Dials and Engraving. Three things about the dials of strut clocks are important to note. First, the hands are almost always fleur de lys style, though on some of the large rectangular size there were occasionally spade hour hands and plain minute hands. Hawkins noted that the hands were likely made by Peter Pendleton of Lancashire who received a medal for clock hands in the 1862 International Exhibition. Second, the chapters are painted rather than engraved. Third, Cole rarely signed anywhere on the dial. More will be said about his “secret” signature below, but if there is a dial signature it is usually the name of the retailer eager to sell Cole-style clocks once these became admired. Prominent among these were Howell and James, Hunt and Roskell, and C.F. Hancock.⁵ In addition, some dials incorporated a manually-set calendar, as seen in Figure 2.

The engraving has special significance because it can help indicate the clock’s date. Early clocks contained the style of engraving termed “free-flowing pierced style on a matted ground” by Hawkins while later clocks (generally post 1845) changed to patterns in relief with the background cut away and often lined. This is in direct contrast to the normal type of engraving.⁶ Figure 4 shows an example on the bottom of the dial for the clock in Figure 1. Note also that engraved designs on Cole clocks are often not symmetrical. Beyond the engraving style, it should be noted that literally all case surfaces at the front and sides were beautifully engraved. This applies also to the clock keys, which were made individually for each clock produced, and an example is shown in Figure 5 again for the clock in Figure 1.



Figure 4. Example of Cole’s engraving showing floral patterns in relief with lined background, from the clock in Figure 1.

⁵Hawkins offers a detailed summary of these and other Cole retailers on pages 18-31.

⁶Richard Good, *Victorian Clocks*, London: British Museum Press, 1996, p. 58.



Figure 5. Engraved key for the Cole Strut clock in Figure 1.

Secret Signature. Hawkins and others have speculated that Cole did not sign his clocks in a noticeable place in deference to his retailers who wanted their own names prominent on the clock. Whether that was true or not, Cole did use inaccessible locations to place his name. For instance, his signature has been found on the front of the central casting, on the inside edge of the bar holding the back strut, on the dial plate, and in other locations. On the clock in Figure 1 we find his signature hidden underneath a handle support as shown in Figure 6 (with the coronet removed), even though no retailer's name existed anywhere on this clock.



Figure 6. Cole's secret signature underneath the handle support of the clock in Figure 1.

The signature itself is also of interest. It was placed on clocks with three punches, THOS, COLE, and LONDON. He always used THOS rather than his full first name, with the S is set slightly higher than the other letters. The CO of COLE is also set very slightly higher than the LE according to Hawkins, but others have said that the LE is set higher than the CO.⁷ Perhaps there were two versions of this punch? Close inspection of the signature in Figure 6 does show the raised S but the four letters of COLE seem to be all aligned. Note that the word LONDON does not appear in this signature. Hawkins stated that clocks signed THOS COLE without the LONDON dated after 1855, possibly reflecting that he believed his reputation was well established beyond London in light of his success in the Paris Exhibition that year.

Movements and Platforms. The oval strut clocks typically used Swiss watch movements of 30 hour duration. The rectangular versions had eight-day movements specially made in Cole's workshop. Hawkins noted that at least two such movements contained the wording "Thos. Cole designer and maker". A rare few of the rectangular movements struck the hours, and this occurred on a gong surrounding the movement at the inside edge of the case. In Hawkins' book, only two of ten rectangular strut clocks illustrated employ striking. The clock in Figure 1 is not in his book but is a striker. An interesting aside is that Cole's striking clocks have no warning.

Figure 7 shows the back of the clock with the position of the trains and the gong.



Figure 7. Rear view of clock in Figure 1 showing position of movement and gong.

⁷Patric Capon, "Thomas Cole: An Innovative Genius," *Antique Clocks*, vol. 11 (June 1988), p. 28.

The platforms in the rectangular strut clocks were somewhat controversial. Because these clocks are thin, the lever escapements used had to be placed in a vertical position to fit in the case. Allix was particularly critical of this situation, stating: “A serious defect in many of T. Cole’s otherwise admirable clocks, is to be found in their lever escapements. These are usually planted on their sides on the back plates (the worst position known) and to say they are not good would be to flatter them.”⁸ Richard Good stated: “A technical criticism of these otherwise admirable clocks lies in their platform escapements which are not of a quality consistent with that of the rest of the clock. What makes the problem worse is that they are so often mounted vertically.”⁹ But Hawkins countered with the analogy that escapements in pocket watches should be planted to allow the balance to run parallel to the case, so that thinness or flatness is the prime consideration. He takes issue with the above two critics by stating that “The criticism that the escapement should be horizontal as this gives a better standard of timekeeping may be countered by the evidence that these strut clocks with their vertical escapements keep good time.”¹⁰ Whether the specific issue involves the quality of the escapements or their position in the clock is somewhat unclear, and perhaps incorporates some of both.

Back of the Case. Some rectangular strut clocks by Thomas Cole employ two mechanisms allowing them to stand. One is the turnbuckle foot which rests parallel to the bottom of the case when the clock is carried in its travel box. To allow the clock to stand upright the turnbuckle foot is pivoted 90 degrees so that, together with the fixed case bottom, the clock will stand securely. Figures 1,7 and 8 show this foot in a pivoted position. The second is the back strut, from which this type of clock apparently got its name. Sometimes termed an easel, it rests flush with the back of the case and is deployed by a release button on the right side near the bottom of the case. When in use, it allows the clock to stand at an angle unlike with the turnbuckle foot, which provides a more vertical position for the clock. Hawkins noted that in later rectangular models the angled strut or easel was eliminated, thereby simplifying the design of the back of the case. When present, this strut was often beautifully engraved (see Figures 8 and 9), as was the top of the turnbuckle foot.

An additional component on the back of the case is the door or shutter that can be opened to reveal the escapement. A release button above this door is pressed and the door pivots down. This component is also often engraved on its outside, though sometimes it was left plain so that an inscription could be placed there, perhaps by the retailer or at the purchaser’s request. On the inside of this door is another surface that can be used for an inscription or for the retailer’s name. The strut and escapement door are shown “at rest” in Figure 8 and deployed in Figure 9.

⁸Charles Allix, *Carriage Clocks, Their History and Development*, Antique Collectors’ Club, Ltd., Woodbridge, Suffolk, 1974, p. 239.

⁹Richard Good, p. 35.

¹⁰J.B. Hawkins, p. 45.



Figure 8. Back of case with strut and strut deployed and escapement door not activated.



Figure 9. Back of case with Escapement door opened.

The Mystery of This Thomas Cole Strut Clock

At the top of this article I said the clock pictured held somewhat of a mystery. I have written elsewhere about this in greater detail, so here will just highlight some of the puzzling elements.¹¹ There are three parts to this story.

The Coronet at the Top. At the top of the case, in front of the handle, is an engraved brass coronet firmly attached behind the bezel as seen from the front in Figure 1 and from the back in Figures 8 and 9. I have been told it is an Earl's or Baronet's coronet. Since this is a design departure from his typical rectangular strut clock tops, it seems likely that this clock was custom designed, perhaps for some member of the nobility. Cole produced other clocks with crowns, one of which is an unnumbered rectangular design with a Duke's coronet offered in an Antiquorum auction in Geneva in 1995.

The Monogram in the Dial. The coronet is repeated within the chapter ring at the top of the dial between the **XI** and the **I**. But also within the chapter ring is an engraved monogram instead of the typical floral pattern found on most of Cole's dials. The letters in the

¹¹Thomas R. Wotruba, "A Thomas Cole Strut Clock Enigma," *Horological Journal*, vol. 145 (January 2003), pp. 20- 23.

monogram are open to interpretation but, after consulting some books depicting monograms, and corresponding with other Thomas Cole enthusiasts including John Hawkins, I concluded that the letters were KK with the second K reversed to produce a mirror image of the first.¹² Figure 10 shows these elements of the dial, making particularly obvious the challenge of interpreting the monogram. It should also be pointed out that the engraving style within the chapter ring did not employ the cut away and lined background so was substantially different from that used outside the chapter ring. This suggests that the engraved coronet and monogram were produced at a different time from the rest of the dial, perhaps later at the buyer's request. Who was this KK with a coronet?



Figure 10. Dial showing coronet at top of case and in chapter ring with the monogram.

The Date on the Turnbuckle Foot. On the underside of the turnbuckle foot is an inscribed date that reads Monday July 23rd 1849. Hawkins affirmed that this is an unusual form of writing a date, since a more typical inscription in a country with nobility would be 23 July 1849 without including the day of the week. Further, if this clock was to mark an important event in someone's life, it seems that, except perhaps for a birthday, such an event is less likely on a Monday than on other days of the week such as Saturday or Sunday. Figure 11 shows this inscription.

¹²One such book is Samuel Sympton, *A New Book of Cyphers*, London, 1739 edition, available in the library of the University of California, San Diego.



Figure 11. Date inscribed on bottom of turnbuckle foot.

Conclusion on the Mystery. I have spent many hours over a period of many years investigating these puzzling elements. But I have not reached any solid conclusion about the event or the recipient of this apparent presentation piece of a Thomas Cole strut clock. Perhaps we do know more clearly when the clock was made based on the inscribed date of 1849. But Cole's clocks began to carry numbers in about 1846 or 1847, so a clock made in 1849 would surely be numbered. Or is it likely that this clock was made earlier and kept back in anticipation of finishing it in response to a special request from an important buyer? The lack of a retailer's signature very likely indicates that the clock was sold before Cole's success in the major exhibitions of 1851, 1855, and 1862. The engraving style is certainly different when comparing the monogram with the floral pattern outside the chapter ring, but the lined background in the latter represented later engraving practice. The presence of the strut or easel suggests that this was an earlier clock as in many later clocks this component was omitted. But the absence of LONDON in Cole's signature implies a later date. The puzzle continues.

If this mystery is never solved, at least we have the pleasure to learn about and enjoy the work of a most innovative and creative clockmaker, unsurpassed in his decorative and artistic contributions to horology. But if anyone can shed some light on this mystery, please let me know at twotruba@mail.sdsu.edu.

THOMAS COLE CARRIAGE CLOCK – WATCH STAND **by Peter Ekins (Aust.)**

The Great Exhibition of 1851 publicised Thomas Cole's work and exhibited six of his pieces among which was a portable clock known as a strut clock. This was a particular design associated with Cole. The feature article in the current newsletter details a Cole Strut clock.

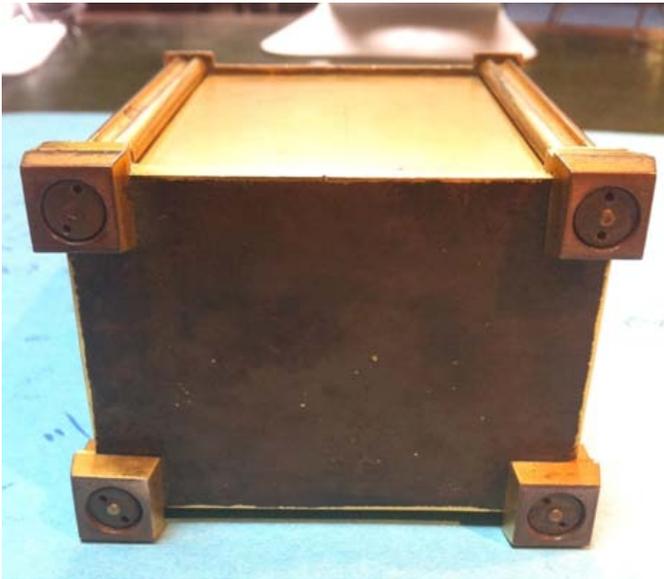
In the London Exhibition of 1862 Thomas Cole was awarded a medal for the excellence of his taste and design. The cases were superlative and outshone those by such makers as Vulliamy, Weeks and even the best French work.

The superb cases are built up on a central casting. The mounts are built up in layers, and are pierced and engraved. The engraving is often in relief contrasting and alternating with the normal type of engraving.

Recently a Thomas Cole piece in the shape of a carriage clock came to light. The diversity in Cole's designs and the inclusion, in two places, of hidden 'secret signatures' of Thomas Cole add veracity to the claim that this is a genuine variation in his repertoire.



This example of Cole's work is an ornate multi piece watch stand in the form of a carriage clock. The case with 20 separate pieces in total is not numbered.



View of under surface of case to show screws

The height of the case, with handle is 125mm and 120mm without. It is 82mm wide and 60mm deep.

The case has decorated solid side panels with minaret scenes. The back panel is plain. Floral emblems decorate the front door panel which has a 56 mm aperture for a pocket watch. The four fluted pillars are simple in design with turned screw finials on top. There is a fixed decorated handle with a squared 'cushion' top piece.



The decorated top plates are layered and conceal Cole's secret signature. The second signature is concealed on the base plate.



HINTS: THE ART OF BLUEING Doug Minty (Aust)

The art of blueing is a two-fold art. One is that steel parts and screws particularly, really look good and a great contrast against freshly cleaned brass plates. The second part is that, after having cleaned steel parts, you have removed the surface patina, and if you blue the parts, while it won't stop rusting, it will resist it.

TOOLS REQUIRED: Portagas Torch, small spirit lamp, or a heat gun used for paint stripping.

The slower the heat is, the easier it is to control, and therefore you will get a better result, especially with very small screws.

Two (2) pairs of insulated tweezers which allow you to pick up hot parts without burning your fingers.

A metal container of clean oil to allow you to quench the blueed parts, to stop the heat continuing to go past the blue color required. Any grade of light motor oil can be used, but after quenching a large number of parts, the oil has been burnt and needs replacing. Do not quench the parts in water as this will suck the water into the surface of the metal and will encourage rusting.

A blueing tray made of brass with holes in it. This tray is easy to make. The brass head of the tray should be about 20 mm across by 4mm thick and 50 mm long. The thin wire on which it is mounted, and the wooden file handle, is so that the heat does not affect the person using the blueing tray. A sample picture of the tray is at the end of this article.

Several grades of fine emery or wet & dry paper, e.g.: 600, 800, or 1000. **Do not use** sand or glass paper as used in wood working.

A container of fine, clean sand. (Container must be able to be heated over a flame). Paint fumes will affect the blueing process and therefore, this container or the sand in it, need to be immaculately clean. Sand from the beach is not clean. It is salt in it and many other impurities. This will spot the blueing. You need to find a supply of clean sand.

Blueing salts, which need to be heated to exchange the required temperature of heat to blue the steel part.

SCREWS

The screws must have their heads polished and the slots repaired and re-shaped. Also the threads need to be cleaned and the thread end of the screw must also be polished if this end is visible when the screw is in its correct location.

HANDS

The hands must be polished any dirt or paint cleaned off. It is important to make sure that the ornate edges of hands are cleaned. A caution with hands – as they are of various thicknesses and shapes, care must be taken to make sure the heat is even all over. Hands are often flat on the top side, and it can be easier to blue them upside down.

If the hands have been repaired with soft solder, they may fall apart when heated. If the hands have been hard soldered together and when blueed, if there is a brass coloured line at the soldered joint, this line can be hidden with black paint or a black Texta whiteboard pen.

OTHER PARTS

The same rules as above apply, keeping in mind that the more difficult the shape, the more problems in blueing evenly.

The parts must be brought to dark blue in colour slowly, as it is very easy to overheat the part. When the part or screw is overheated, it goes past blue in colour to a dull metal colour. This finish also occurs just before the correct blue is achieved, so it is important to control the rate of blueing. If you go past the correct blue in colour you have to repolish the screw or part and start all over again. You gain nothing by highly polishing the screw or part, especially on a buffing machine. It appears that the blueing colour needs a small amount of graining to give you the best results.

If you have any questions or comments to make about blueing, please contact Doug Minty:
dminty@optusnet.com.au



Blueing Tray from above



Side view of Blueing Tray

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