John Cairns (1751-1809) and Other Early American Watchmakers

by David Cooper (CO)

A final evening reconstructed

It was a slate gray day, as was typical for that part of New England, sometime early in the year. It had been raining and snowing most of the day, leaving the cold ground icy and slick and, as night came, a bone chilling humidity could be felt. That night, John Cairns closed up shop a little later than usual. An isochronal problem bedeviled his mind, which of necessity—not due to a cure—he needed to let go of for the night, as the day and the light were waning fast, and accurate observation was becoming impossible. The job had started out as a profitable one.

The shop immediately adjacent to his shop had also closed its doors for the evening. It had, until recently, been the work place of his friend and advisor, the late Saunders Pitman, a silversmith. John Cairns had discussed the art of casemaking and the progress of manufacturing in America many times with Saunders, who

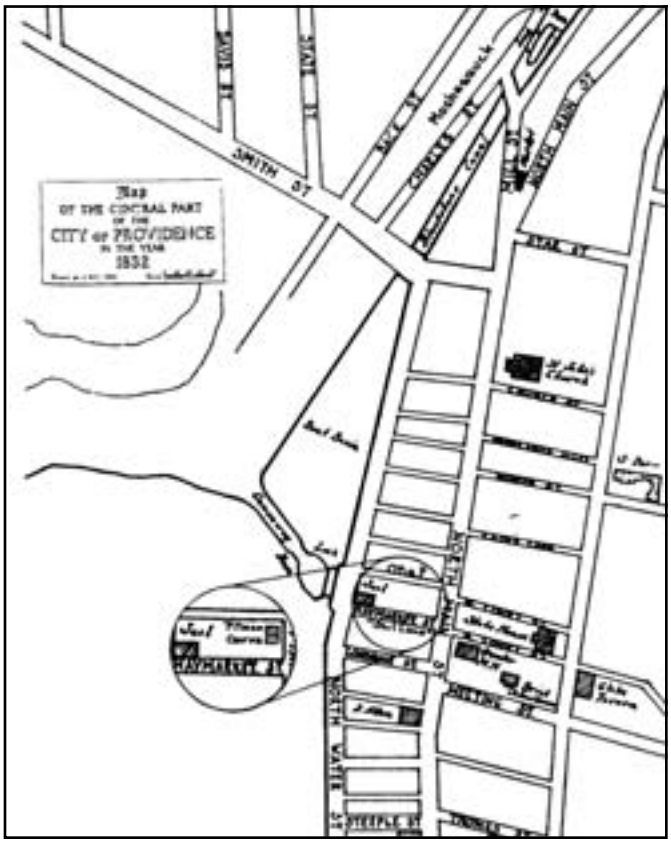


Figure 2. Providence, 1832. Otis St., Jail Lane, Saunders Pitman's shop, John Cairns' shop, and the Moshassuck River locations have been added.

Figure 1. John Cairns #5, notice the mixing of upper and lower case letters in Providence, the roughly pierced and engraved cock, definitely not of London manufacturing quality. Also notice that there is really almost no decorative engraving except for the rather whimsical indicator hand. This watch is featured on the front cover.

was the leading silversmith of his time and who produced exquisite works of art that are still highly sought after today. John missed him dearly.

As John Cairns locked the front door that night, he glanced across the street at the State House, which still stands at the top of the incline at the end of North and South Court Streets. It overlooked the industry of early Providence as well as the great cove beyond. Today's courthouse overlooks a park, which has replaced the waterfront buildings district and a significant piece of American history.

John Cairns' thoughts returned to the watch, and he wondered when Luther would come back to town. As a talented apprentice, Luther had become quite a good craftsman as well as a good friend. Also, being a man of more than reasonable mechanical intuition and skill, Luther would enjoy the challenge of this problem. When you have the perfect problem the student is never available. Luther had the makings of a great watchmaker—the right mindset. He was also intensely interested in watch manufacturing as a production process.

It was now completely dark. Cairns walked up South Court Street, encountering slippery ice underfoot, to the Globe Tavern for a refreshing ale, the warmth and company of friends, and most of all to temporarily get free of the watch that plagued his mind. As an experienced watchmaker in the true sense, he knew that the solution lay in diversion.

Later on, feeling better for the ale and the lively discussion, he headed up Benefit Street and then over to North Main, past the dark stone church of St. John, which stands today as it did then, looking down upon the events that were soon to follow.

As John headed towards Mill Street, a little piece of history took shape on this cold, slushy night. Feeling more comfortable with the ale, he headed to the trail along the Moshassuck, a dark, narrow, fast-flowing channeled river with high steep banks that this night could not have been scaled by the most sure-footed, let alone by someone caught unaware and engrossed in thought.

Again, fully preoccupied with his problem watch, John was walking past the mill river bridge on the narrow bank of that black river when a tragedy happened. His foot slipped. It zipped out and the second foot went right after it, towards the bone chilling black water. In slow motion, his feet went up in the air and he felt the weight of the Cairns #1 movement in his pocket as gravity pulled it against the sudden motion. In the brilliant imaging of his mind's eye he saw the staff break . . . now the train was able to run free . . . Crack! . . . His head hit the icy bank, the image went blank, and with increasing speed, John slid down the bank. The frigid, black river embraced him, rushing on its way out of the great cove. He was never seen again. The year was 1809.

Was this the sequence of events? The places, people, and events are real, although the story of John Cairns' evening is the creation of the author.

In the fall of 1809, Luther Goddard purchased the tools and equipment of John Cairns, his friend and teacher. Then he set out to put America's first production watch into being, as he and John had discussed so many times.

The times

Ted Crom and I agree that by approximately 1785 to 1790, there were in this country at least the beginnings of the importation of watch materials, in different states of finish, sufficient to make an entire watch. By 1798 certain businesses were not only large enough to advertise said wares but, in doing so, also perceived a market for those wares. An example follows:

> Watch Furniture, Just arrived in the ship *Nancy,* Capt. Orne, from London, and for Sale, by Richard Salter, Jun. Store No. 4 Court-Street, adjoining Mr. John Carnes'.[1]

Figure 3. The Moshassuck River of today with apparently little change from the time of John Cairns.

> A general assortment of Watch furniture, viz. Best Glasses, all sizes; Glass Gauges, best gilt Chains, twisted Wire, Common, do. best gilt keys, Common do. best gilt Hands, Steel so. fashionable Dial plates, Gilt edges, assorted *Pinion Wire*, (author's italics) Good Steel wire, *various Cannon Pinions, best Verges, Balances, Locking Springs*, Bobbin Pendulum Wire, best Springs sized, good Movements, Dials, Motions, Springs &c ready for finishing, stout long silver Pendants and Bows, *Balance Wheels in pinions and fusees finished, contrite* (sic) *wheels on pinions,* finished; Clock wire, inside Chains, *Case Springs and Buttons, ...*(clock material omitted)..... *a capital Engine with spare Cutters for finishing of teeth of Watch Wheels, Turning Lathe with collar and mandrile, spare chucks, & c.* Turn Benches, with rests, best gravers, Pivet (sic) Files, *Balance Wheels,* Files, Spring Saws, framed, Pin Vices, Fine Scratch Brushes, Hair do. Best Crocas, Gold *Second Hands, Cork* (Cock) *and Slide Screws,* &c. &c. The above articles will be sold low for cash, or Notes payable in three months, with good Endorsers. —*Columbian Centinel,* October 31, 1798.

Ted Crom and I drew several conclusions from this ad, which Ted has generously provided for this article. The first being that Richard Salter had been in business for some time already, and that most of the components needed to make a watch had been available to some degree prior to the time of this ad, which is a list

[1] To the best that I can determine, according to the address mentioned, the John Cairns herein referred to is that of Pawtucket (next door to the New England Pacific Bank). He was engaged in a large and successful hat manufacturing business and advertised the same at a later date. There is only a North and South Court St. in Providence.

of materials and tools that would have been found in English repair shops. He was certainly not the only person of his time who imported watch materials that were readily available abroad.

Between 1774 and 1799 the legendary Thomas Harland, who has long been credited with being the first American watchmaker, ran numerous ads, including the following:

> Thomas Harland, Watch & clock Maker From London . . . that he has opened a shop . . . where he makes, in the neatest manner, and on the improved principles, horizontal, repeating, and plain watches, in gold, silver, metal, or covered cases. Spring, musical, and plain clocks; church clocks, regulators, &c. (This would be a tall order even for Dents of London to perform! Unfortunately the extravagance of his claims makes it difficult to ascertain what he actually made, if anything. It was common for retailers to call themselves makers and list items that they could supply.) . . . Watch wheels and fusees of all sorts and dimensions cut and finished upon the shortest notice, neat as in London, and at the same price.—*Norwich Packet*, December 1773. (CT)

In a more telling ad, Groton, Connecticut, 1794:

> *The Connecticut Gazette,* February 13, 1794. Thomas Harland.—Ten Dollars Reward. The Subscriber's house was broke open on Saturday ninth the 8th inst. and the following articles stolen, viz. one silver watch wrought on the inside 'Thomas Harland, Norwich, No 32,' . . . Whoever will take upsaid theif of thieves and goods, and secure then to me, shall have Ten Dollars reward and all necessary charges paid. Edward Packer.

From this information we know at least the Harland watches were signed to some degree, but this is not proof of making. As David Penney has stated, "99% of all (English) watches do not bear the name of the maker." Virtually all English watches went through numerous trademan's hands before being completed. Each person made a separate portion of the watch.

For an in-depth history of Thomas Harland see the April 1995 *NAWCC Bulletin,* "Thomas Harland Clockmaker, Watchmaker and Entrepreneur" by William Willard. I do take issue with Mr. Willard's production estimates of 200 watches attributed to Thomas Harland. This may represent sales, but to the best of my knowledge no example of a Harland watch exists. By comparison, there are many known examples of Luther Goddard watches, with production numbers ranging from 1 to approximately 400.

The John Cairns watch illustrated in this article (shown in figures 1, 5A, 5B, 6, 7 and 9) is most likely one of only a half dozen or less that he made. I found it and I was not even looking for it. The argument that casts some doubt as to whether Harland actually made watches is that, to the best of my knowledge, no watch exists that is signed by him, his son, or any of his apprentices. One can draw the conclusion, based on a complete lack of signed watches, that making watches was not what the apprentices did. For example, we have signed watches by John Cairns, then Luther Goddard, and finally Parley Goddard. Until a Harland marked watch turns up we will never really know if he actually made watches. He has a great many credentials of having made watches, but where are the watches?

There is no real reason to regard someone as a watchmaker in the true sense just because they advertise as one. Would you actually step into any watchmaker's store today and ask to see watches of their own manufacture? Unfortunately, it would seem that, since the beginning of the trade, those in the repair business have labeled themselves as watchmakers and clockmakers, thus making it very difficult to get to the root of the matter.

More ads of the period

> JOHN HARRIS, Harpsichord & Spinnet-Maker from London, Begs Leave to inform the Public . . . (that) The same Artist Makes all Sorts of Watch Cases: he covers them with Shagreen, and repairs those which are defective; in this branch he hath assisted almost every Watchmaker in Town . . . *The Boston Gazette*, May 8, 1769.

> SAMUEL HAYDEN, Clock and Watchmaker, from London . . . Mr. Hayden flatters himself, from the long practice and experience that he has had in the much admired science of Watch Guilding, he capable of executing that branch in a much super-

Figures 4A-4C. Three original Cairns ads.

ior style to any thing of the kind done on the continent of America.—*The Columbian Centinel,* September 3, 1794. (MA)

It is also logical to assume that many other people were engaged in the tools and materials trades during this period, some who advertised and some who did not. The Wyke catalogues were available for any entrepreneur who wished to engage in the business of watch and clockmaking.

By the greatest of good fortune the probate of the estate of John Cairns (or Carnes) was found by NAWCC member Sara Steiner, whose help in this matter was invaluable.

David Penney states that a good deal of the materials listed in Table I would also have been found in a well equipped repair shop and undoubtedly some of the materials and tools were used for that purpose. However, it is not probable that there were sufficient watches in the Providence area at the time to justify such an extensive inventory of tools and materials for repair only. It is also clear that items such as an unfin-

Figures 5A and 5B, right and above. The dial side of Cairns #5, with a very distinctive, but not unique, ringed crystal aperture and a magnificent case of American manufacture. The case is unmarked and has a three-piece hinge. According to David Penney, English case hinges were five pieces exclusively.

Table I — Inventory of Articles in Shop

An Inventory of (the) estate of John Cairns late of Providence, deceased taken by us the subscribers duly appointed for that purpose on the 7th of April 1809 by the Hon. Court of Providence of the town of Providence. Will book No. 10 Pg. 452. (Author's Note: Household items not listed; misspellings and capitals are as found. All italics are the author's, noting materials and supplies that would be consistent with the manufacture of watches.)

1 Glass case 21/ dO not so large 16/6	6.25
1 dO dO 16/6 1 dO 12/ 1 do large case 18	7.15
1 Bow window & Shutter Barrs	13.
1 writing desk and frame	1.75
1 watchmakers bench /w draw(ers?)	.50
Amount of Shop Furniture Brought over	30.75
21 Watch chains 6 10 Gilt watch seal 7/6	2.25
259 Christials @ 3 per doz 7 watchchanes 2/3	15.37
13 ft. watch pinion wire @ 1/? Foot	3.25
1 Watch depthing tool 21/1 *Horazontal engine* 21 (Cylinder Escapement)	7
1 screw head tool 3/ 1 *Brass Lathe* 6/ 1 walick holdere 4/6	2.25
1 adjusting tool 3/ *1 upright tool* 15/	3
1 hand vise 1/ 1 pin vise, 1 pr sliding tongs	1.25
1 pr spring dividers *2 small watch screw plates*	" 80
1 pr plyers, 1 *small watch lathe* 4/6 (Turn)	" 75
1 pr cutting nippers, 1 chrystial gage, 1 blow pipe	
1 sandl (?) *1 case hammer* 2 Reveting hammers	1.20
1 lot of various files and *small turning tools*	.50
1 lot small files, arber, broaches & Pincher etc.	.50
17 set square watch pillers 13/6 *sundry round* dO /3	2.75
Sundry Arbers with Collets 2/3	.37
1 Tin box containing sundry verges 3/	.50
1 watch movement unfinished	7.
1 *dO nearly finished*	11.
1 tin box containg sundry hands & screws	.50
1 Polishing Block & stee 3/3 3 watch makers glass covers	.75
1 lot to polishing stuff & Blocks	.87
4 cases punches 5/ 1 Bench vize 12/	3.
2 small steele lathes (Turns) 12/6 1 hand brush 1/	3.41
2 watch makers saws 1/6 2 signs 4/6	1.
1 box containing arburs & other tools 4/6	.75
1 lot of small tools 1/6 6 cap punchers12/1	.25
do dO 10/6 4 iron rings at Richmond's 1/	1.95
1 oil stone 6/ Tin pans 5 dO Boxes 2/9	1.45
4 Scrach Bourches 7/6 1 *Box containg watch case patterns*	1.55
	112.69
Amt. brought over	$112.69
1 Box containing sundry clock pinions vize pin	.50
4 watch brushes 1/3 1 Breast plate & other articles	.71
1 Box containing parts of watch movements, etc.	.25
1 Timepiece 3/ 2 old boxes containg old iron brass copper, etc.	5.50
2 wooden stools 2/3 1 stove & pipe12/	2.88
1 Tin Can cont. varous parts of movements	.50
1 *do do watch pinions* 1/6	.25
1 Box containtng parts of new watches 6/	1.
1 wooden box cont. pieces rough gold	.30
2 small wooden Boxes cont. rubbish	.50
125.8	
Amt. of articles of the house added	101.39
	226.49

John Merry
John Lassell Appraisers
Geo Wheaton
Personally appeared 24 April 1809 John H. Green
Administrator of the estate of John Cairn, deceased by order of
Nathan W. Jackson Probate Clerk
Recorded 14 August 1809

Figure 6. The dial side of Cairns #5 showing the number 5. There are no other numbers on any of the watch parts, indicating that this was the only watch being made at the time in Cairns shop. Watches in the trades almost always had tracking numbers for the parts, and in some instances the name of the maker was scratched on the barrel and some of the bridges, as makers handled a number of watches at once.

GENEALOGY

Carnes, Cairns

Lynn, MA
John Lewis
↓
Mary Lewis
B. 1720, D. 1798

Boston MA
John Cairns
&
Sara Baker
↓
(Rev) John Cairns
B. 1723, D. 1802

Rev. John Cairns
&
Mary Lewis
↓
Dorothy
JOHN B. 1751, D. 1809
Lewis
Thomas
Thomas
Mary
Barrill
Edward
Joseph

John Cairns (Jr.)
&
Nabby Wainwright
M. 1786
↓
Mary Elisa B. 1802, D. 1815
Ann Elisa D. 1892

I am not absolutely certain of John Cairn's wife and children.

ished watch movement, watch pillars, case dies, and many of the tools would only be of use in watch manufacture. This is not to say that, like the English shops, Cairns did not send out his watches to have some level of finish performed by specialized tradesmen; gilding would be one example.

In England watch tools and materials were passed on from father to son and so tooling and materials, for the most part, would be part of an established shop, without having to be acquired. This was clearly not the case in America at that time, which would also explain why the same specialized trade structure was just not there. If it had been, there would be countless American watches from this period, as they would have been relatively easy to make. English makers did not even consider making the entire watch in-house. It is also clear that the trades never really took hold in the U.S.; there were no significant quantities of watches made in the U.S. until the manufacturing era, which started with the American Waltham Watch Co., ca. 1852.

Without the untimely death of the late Mr. Cairns the chances of obtaining a perfect listing of the tools and equipment owned by a true maker of watches of this period would have been slight. The historic significance of this document cannot be overstated. A description of Cairns from *The Old Clock Book* states that Cairns "in 1784 was the only man of his time who made the watch entire. He made watches of any fashion (vertical or horizontal—verg or cylinder) required for $25 warranted for two years without expense except in case of accident. Some of his watches are still to be found in going order. He accidentally drowned one night by falling into the Moshassuck between Mill and Shingle bridges."[2] He may not have been the only man of his time to make the watch entire, but it is certain to me that he did make watches; or as much of the watch as anyone could be reasonably expected to make anywhere in the U.S. at that time.

What work was actually performed by John Cairns? It is clear by the workmanship that he more than likely engraved the plates, pierced the cock, spoked out and mounted the wheels to arbors, which he made from pinion wire. None of this work would have been up to the London quality standards of the period.

He assembled the plates and pillars, had them gilded, planted the wheels, adjusted the escapement, and cased the watch in his own case. He learned the making of pewter ware from his father. I do not think that he cut his wheels or fusee, but he did make the ratchet wheel spring and click mounting. The balance, staff, chain, and mainspring are English, as was the dial and most likely the hands, together with the rest of the materials used.

[2] N. Hudson Moore, *The Old Clock Book* (London, 1912).

Contract watches vs. maker's watches

If we use the English standard of manufacture and we accept Leonard Weiss's book *Watchmaking in England 1760-1820,* one could easily take the position that there were few if any English watchmakers. The watches were basically constructed of parts made by the various tradesmen of the industry. The fusee maker made the fusee, the dial maker made the dial, the train shop planted the wheels, the escapement maker planted the escapement and so on.

It is clear, according to the records of the time, that there was simply not enough watchmaking going on in the U.S. to support this system in its entirety. So the watchmaker had to undertake the large majority, if not all, of the work himself. If the watchmaking trades were there at that time we would see considerably more American watches from this period than we do.

In the English system, by the time the customer actually owned the watch, it had passed through some 40 hands, more or less (David Penney's assessment). Some of the repeating ebauches as well as other parts were even made in Switzerland. It is this method of manufacture that produced such a consistent level of high quality in handmade watches. Each tradesman was completely tooled to make a certain part or a few parts. This method of manufacture also allowed designs to be changed for only a few watches, because watches were made in small batches.

If we use the standard of a single manufacturer for the entire watch then we have a hard time finding actual watchmakers because virtually every English watch of the period is a contract piece, regardless of how it is marked. It doesn't make any sense yet the individual watchmaker standard only seems to apply to American makers. Why not give credit to these early American watchmakers for what they accomplished? Many watchmakers and firms in England and on the continent during the same period were really only interested in adding their own escapements and balances etc., not making the rest of the watch.

Contract watchmaking was also a matter of economics. It was the best and most inexpensive method of making a high quality watch. The Swiss, especially, were close on the heels of the English, so cost, together with quality, was an important factor. It must be remembered that the rules regarding makers etc. are the collector's rules, not those of the makers. The manufacturer/marketer put together watches in any manner that justified what they were trying to accomplish, and those methods could have changed from run to run; in fact a run could have been one watch.

The name on the dial and/or movement was generally the retailer who had the wherewithal and the capital to make sure the process was completed. A typical example would be: Dent is on the dial and movement. It is clear that Nicole Nielson is the maker, and the ebauche is clearly numbered in a different series from Dent's usual numbering. So who is the maker? I say that it would be Nielson in this instance, because Nielson did all the ferrying around of the ebauche. Dent had them delivered with the name Dent on the watch so that the watch could also be called a Dent. The choice is yours—in many instances, the attribution is difficult to ascertain.

Some people would say the watch is a Dent and that would also be correct. The average collector is not required to be an expert in identifying movements, but it certainly helps. Some movements are so generic that identifying the "maker" is all but impossible. In some instances the movements were made ahead of time and awaited a retailer, whose name was then added.

Let us take a look at a definition that more nearly fits the truth of the matter and would make most collectors, including myself, a lot happier. Through many years of collecting and investigating into this matter I have set my own standards as to what constitutes a maker's watch vs. a contract watch, and I think these standards fit all watchmakers everywhere pretty well, although there will always be exceptions.

In general I do not like rules. In many cases they prevent one from actually seeing the truth of the matter. *The rules do not make the watch; the watch makes the rules.* As in the sciences, one proven contradiction to an accepted theory can bring down years of accepted premise. So it must be with early timepieces. Imagine, if you will, trying to make a set of rules that could govern all automobile types, models, and manufacturers, between the present and, say, 1915—a far shorter time span than the era of watchmaking. Many things could be said and many would also just have to be left openended.

In my opinion, to be the "maker" the person or firm has to have performed at least one of, or some of, the following jobs, in addition to actually putting together the business venture and using their name: been involved in the design of the piece (unique design elements made to order), adjusted, rated, or modified the ebauche, finished assembly or assembled from any type of manufactured parts in any state of finish from any location. I really think that is the way that collectors of continental watches have defined their watches for years, whether they know this or not.

Luther Goddard and his watches

To fully understand the sudden production rates of Luther Goddard and his success in competing with superior English watches, and to a much lesser degree other continental watches, one needs to look at the historical context that was the key to his success, namely the war of 1812. By success I mean that he put watches into production and sold them in a quantity unknown before in the U.S.

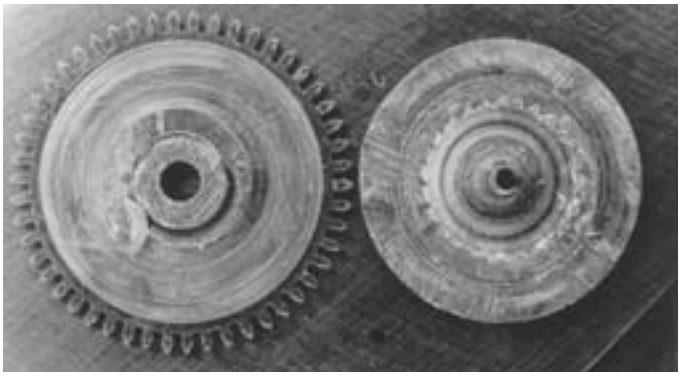
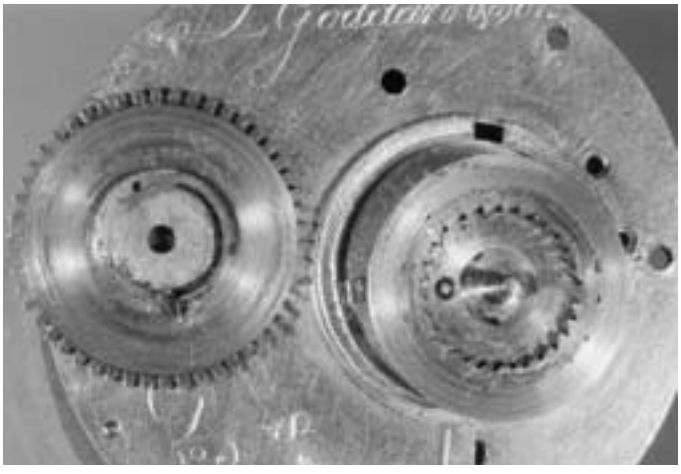


Figure 7, above, Cairns # 5, and **Figure 8, below,** Goddard #282, showing the unique and unusual fusee click and ratchet system of Cairns #5 and Goddard # 282.



Goddard's activities, as quoted in *The Book of American Clocks*, were, "Set up shop, Shrewsbury, 1809. Europe trained helpers. Tariff restrictions favorable, (English) imports blocked by Jefferson Embargo; imports flooded the market again, 1815. Production ended by 1817."[3]

Congress, lead by Henry Clay, convened in 1811 to consider war for some of the following reasons: war hawks were land hungry, there was concern over declining agricultural prices together with the restrictions of markets abroad, and finally the impressement of American sailors by British fleets.

In 1812 the war was declared and became known as the "Second War of Independence" (economic independence). In England the war was merely a burden and had no strong effect on the country; whereas, in the U.S. there were large economic and political effects. On the economic front the English navy successfully blockaded the U.S., neutralizing the U.S. navy. This meant that suddenly practically no English or other watches were coming into the country. So who was the person poised to fill the watch supply gap? Luther Goddard. It is a certainty that some watches were smuggled into the U.S., but it is also certain that the demand was greater than the supply.

From the first embargos of 1811 to the signing of the Treaty of Ghent in 1815, Luther Goddard basically had a total command of the market. Certain materials were scarce and therefore anything he was able to obtain for manufacture was fair game, thus accounting for some of the very different Goddards that have been found.

As famous as Luther Goddard is, I have yet to see an in-depth analysis of his work as an American maker. His watches have numerous distinctive traits, some of which can be traced to John Cairns. The one design feature that is clearly that of John Cairns is found in the construction of the click system of the fusee. I have never seen this feature in another watch. John Cairns correctly observed that if the clicks were mounted inside the ratchet wheel facing out that the ratchet wheel would have the effect of jamming the clicks into the teeth with the pressure exerted on them.

One could say that the system may have worked too well as the clicks are in poor condition, indicating too much stress. Their location at the center of the fusee allowed them to come under considerable stress. Another factor was that the ratchet wheel had to be cut as an inside wheel and therefore had to be done by hand.

Luther Goddard was in a number of ways a more creative thinker than he is given credit for. For example, for the regulator he simply cut a recessed wedge-shaped ring in the back plate, which the brass regulator just snapped into, a great simplification of the English method of the period, known as the Tompion regulator, which in most cases required a separate bridge with two screws, regulating square, and gear segment with indicator.

In approximately 1814-15 Luther Goddard constructed the only known rack lever made in the U.S., which had several distinct features, both as a Goddard and as a rack lever. In the first place the rack is made of gold (the first known use of gold in an American watch not for decorative purposes, as well as the only gold rack that I have ever heard of), and it has a going barrel, as far as I can tell another first in the U.S. None of the material in the Goddard watch bears even a reasonable resemblance to rack levers of this period, as seen in Figures 10 and 11. By and large the wheel and pinion work has an average finish, which is uniquely not English.

By the greatest of good fortune the case is English and therefore hallmarked. The previous keyhole is plugged, but it is clear that it is most certainly original to the watch, which was made to fit the case. Somehow, the original movement was rendered unrepairable, possibly making the movement later than the case by

[3] Brooks Palmer, *The Book of American Clocks* (Macmillian: New York, 1950).

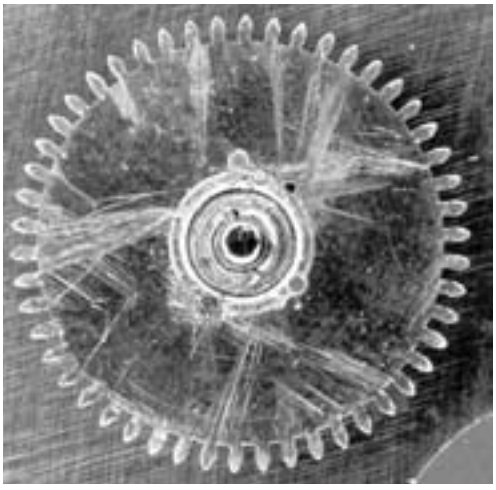


Figure 9, left, Cairns #5, and **Figure 10, right,** Goddard #282, showing the fusee wheels secured to the fusee without any washer, just with the taper pin alone as the washer and retainer.

several years. This being a high-grade watch, he may have thought that he would use the best case he could get, an English one, or it was the only one available at the time. It is always possible that this watch was recased at a later date, but the watch is a perfect fit and really would not have been worth recasing at a later date as the rack lever soon fell out of favor.

According to my information Luther Goddard would have began his watchmaking enterprise in 1809, which is consistent with the hallmark on his rack lever #282 and puts his production at approximately 57 some odd watches per year; this would have been quite an accomplishment. Some 400 odd watches appear with the Goddard, or L. Goddard and Son signature, until about 1817. After that the signature of Parley Goddard appears on watches that are, for the most part, if not entirely, contract watches made entirely in England. Goddard was certainly the first American to make watches in quantity.

Unlike other Goddards, all the steel work under the dial is polished, and most importantly there is a steel cap jewel bearing on both ends of the balance—the first "jeweled" watch made in the U.S., or America's first high-grade watch. The jewel bearing in the potence is also of a unique design in that it is a hardened steel washer secured by a screw offset from the pivot. If wear

Figure 11, left. The train of the Goddard #282 with the gold rack and going barrel. **Figure 12, right.** An early Tobias rack lever of approximately the same period.

Figure 13, above. A wonderful set of whimsical gold "hands" on Goddard #282 (replacement minute hand made by the author). **Figure 14A, below.** Goddard rack lever #158 showing steel jeweled balance, lovely pierced eagle cock, and special dished cock screw with blued rim.

Figure 14B, left. Goddard rack lever #158.
Figure 14C, above. The piller plate of Goddard #158 as found.

ever occurred the washer could simply be rotated a little and then there would be a new bearing surface exposed to the pivot. To me it is clear that Luther Goddard was not just a maker of watches but also a man of mechanical intuition who wanted to make a better watch.

Shown here are other American watches of the premanufactured era. These watches are not meant to be a comprehensive collection but rather an illustration of some important and interesting watches of this era.

A note about New York casing of English watches of the early 1800s. In 1817 the distress of the out of work

Figure 14D, above. The piller plate of Goddard #158 after restoration.
Figure 14E, below. The potence with circular steel jewel.

Figure 15, left. Fatton #9, eleve de Breguet, Philadelphia 1832-9. The only known Breguet style ruby cylinder made in the U.S. This watch has a gold balance, a symmetrical train, ungilded wheels, and an English case. The replacement cylinder carriage was made by the author. The English case indicates that the watch was most likely started in England prior to Fatton's arrival in the U.S. **Figure 16, right.** Dial side of Fatton #9 showing the single screw holding on dial regulator style layout. The matching key was a wonderfully lucky find at a NAWCC National Convention. All hands have been replaced by the author. The bulls-eye crystal creates the refracted second hand.

Figure 17, left. Dial side of Fatton #9; notice the ungilded bridges and wheels. **Figure 18, right.** By my definition this is an American watch; Asa Whitney, #53, Whitney's number, New York. Notice that the reliefs in the regulator and cock foot have been elongated so that the entire top plate could be removed to adjust the escapement without removing the balance or those two plates. Basically, he at least finished the watch, bringing it to time.

Figure 19, left. The dust cover of Asa Whitney #53.

Figure 20, above. Josia Medley, Boston, ca. 1732. I believe this to be the earliest known documented American contract watch, most certainly of London manufacture, with broad footed cock and Egyptian columns.

Figure 21, above. Rowley, Shrewsbury (MA?). Engraving was performed after gilding; American watch papers back to the 1840s. This is typical of repairers who purchased finished and gilded watches and added their names. **Figure 22, below.** Bliss and Creighton, New York, chronometer makers who were more than capable of making any part of this watch, but as far as I can see it is just a very nice contract watch.

watchmakers of the London, Coventry, and Liverpool trades was so great that a report on the same was delivered to the House of Commons in July of 1817. It would therefore make a great deal of sense that some case makers moved, for economic reasons, to New York during this period, thereby explaining the sudden increase in production of high quality 18K cases of exact English character from New York starting some time before the 1830s.

These cases have no hallmarks, and there is usually an eagle in a cartouche on the back cover, with the serial number matching that of the watch. From the outside these cases are indistinguishable from the English cases of this style and period. These case makers would have had the exact knowledge of how to get the business of casing watches from England in quantity, and there may also have been an English duty issue that may have made American casing more attractive. It was not unheard of for cases to be smuggled out of England without hallmarks to avoid duty.

Figure 23, right. Probably one of the most famous and sought after contract watches is the Brown & Sharpe watch marketed by the company of the same name. Their principal business was the manufacture of high quality machine tools together with some watch and clockmaking tools. This watch is a Liverpool fusee lever of quality with a Massey #3 escapement and most likely dates from around the 1840s or 50s. (Setting square for the center wheel is missing.) The movement is identical to an M.I. Tobias "Lord Street" of the period, see BULLETIN No. 281, "English Watches for the American Market, Part II," by Michael Edidin, pg. 678, fig. 37.

Figure 24 is also a good example of movement advertising. It must be remembered that advertising in that period was very limited in scope to local papers until the middle of the century, so many manufacturers used the watch for that purpose, especially the Swiss, who covered the cuvets and movements with all sorts of useful, useless, and redundant information such as "timekeeper," "in line anchor," etc., in addition to the maker, location, and number of jewels.

I also consider such features as gold jewel settings, gold wheels, engraving, damascening, nickel plating, and fancy steel work, to mention a few, as a manner of advertising. Unlike most other countries almost all American movements were sold and displayed separately from the cases, so the first time a watch would have been seen in the jeweler's case was as the movement only.

English watches of the period are occasionally seen with prolific documentation, just the name and serial number, or just the serial number alone. This may be further explained as there were London, Liverpool, and Coventry finished watches whose styles could vary widely. Generally, English movements were very plain;

Figure 24, left. E. Stevens, Boston, ca. 1730s, fine London contract watch, broad footed cock, Egyptian columns, no documentation, England or U.S. **Figure 25, right.** A rather unusual contract piece made by John Moncas, Liverpool, for Davis and Palmer & Co., Boston, ca. 1840, table roller, jeweled to the fusee, gold balance. All the necessary improvements to the patent lever had been performed at a time considerably earlier than the manufacture of this watch; in other words, advertising by puffing. By the 1830s, Liverpool watches, for the most part, were being routinely cased in 18K New York cases of high quality. The "Patent" on early Liverpool watches usually refers to various Massey escapements.

Figure 26, left. A highly experimental pivoted detent escapement by Jacob Karr, Washington.
Figure 27, right. Jacob Karr #1.

the widely held belief that the English Guild quality of craftsmanship was enough was actually true for some time.

With the notable exception of Tobias of Liverpool, the English believed, for the most part, that advertising was in poor taste. Guild standards of quality were a given, no more need be said. As time went on, some famous London makers began to add more and more "notations" on the watch plate. This was most likely due to increased competition.

Conclusion

First let me say that the English and American watches presented are just a sampling of what is out there that is interesting and important. I have seen many other one-off pieces, some of which are clearly the only one ever made or assembled by the maker. The fact is that it would be wonderful to have comprehensive documentation on them all, and hopefully this article is a start that will help to bring these early watches forward so that this important and largely ignored piece of American history can be documented. For now, John Cairns is the earliest known American watchmaker, and this story of his accomplishments and those who followed will hopefully bring other watches and makers forward. The premanufactured era is really the last frontier of undocumented American watch history.

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About the Author

David Cooper, FNAWCC, AWI-CMC, is a Past President of Chapter 21. He was chairman of speakers and exhibits at the 1991 NAWCC National Convention, a Crafts Competition judge and a workshop coordinator at the 1988 National Convention, and a crafts winner at the 1985 and 1986 Conventions. He has been a recipient of the Golden Hands Award, an NAWCC National Citation, and a Grateful Appreciation certificate. He also formed Boulder Horological Society Chapter 160.

David has written for such publications as the *Horological Journal*, the *Bulletin*, and Marvin Whitney's *The Ships Chronometer*.

There is virtually no part of a watch or clock that David has not made at one time or another, including an impulse jewel for a Thos. Earnshaw pocket chronometer. There is practically not an escapement that he has not analyzed and adjusted. He has made wheels of all types and sorts; spliced fusee chains; made pallets, staffs, pinions and hands; reengraved watch parts; ground crystals; reguilding; ground and polished jewels to fit the original gold chatons; and overhauled everything from ladies wristwatches to several McClintock four and two-dial chiming street clocks.