Evolution of Watches: From "Clock-Watches" to Pocket Watches

Randy Jaye

Introduction

During the 15th century in Europe, watches evolved from portable spring driven clocks. The invention of the mainspring allowed for portable timepieces (watches) to be developed. Watches were rarely carried in pockets until the 17th century.

Pocket watches became the first mobile timepiece and lasted in common use for over 400 years.

Pocket watches surely helped the Industrial Revolution build the modern world. Their popularity started to decline around the World War 1 era as the more miniaturized and more convenient wristwatch came into fashion. In the 1930s, world-wide wristwatch production outnumbered pocket watch production and the role of the pocket watch drastically declined from this time forward.

Pocket watches are still made today in limited numbers (some are high priced mechanical marvels, some are presentation pieces, some are mid-grade and many are of the cheaper quartz variety.)

[2]

Evolution of the Watch: Peter Henlein (1485-1542)

During the 15th century in Europe watches evolved from portable spring driven clocks. The invention of the mainspring allowed for portable timepieces (watches). Peter Henlein (1485-1542), a locksmith and clockmaker, has been credited as the inventor of the watch. He was one of the first German craftsman who made 'clock-watches' and is referenced as such in a 1511 publication. *(Watches weren't widely carried in pockets until the 17th century).*



<u>Left:</u> A monument honoring Peter Henlein by Max Meißner, in Hefnersplatz, Nuremberg, Germany.

He was a well known maker of small portable and ornamental springpowered brass clocks, which were very expensive during his time and fashionable among nobility.

<u>Right:</u> A Peter Henlein 'clock-watch' dating to the early 1500s.



'Clock-Watches'

The first timepieces (clock-watches) that were both mobile and worn (either attached to clothing or worn on a chain around the neck) were made in Europe (notably Germany) during the early part of the 16th century (1500s). These timepieces were quite heavy, typically engraved and ornamental, drum shaped cylindrical brass boxes that measuring several inches in diameter and had only an hour hand. They were not known to be very accurate time keepers.



<u>Left:</u> Clock-Watch circa 1510. Made by Peter Henlein (in the German National Museum, Nuremberg).

<u>Right:</u> Watch movement made entirely of iron with a spring-driven verge, which would have been used in an early drum watch (circa early 1500s). It is fitted with a stack freed regulator, which helps to control the rate at which the spring unwinds by friction.



"Nuremberg Eggs" The First Watches

During the early 1500s the mechanical timepiece marvel of the age became known as the "Nuremberg Egg" due to its oval shape. These timepieces were the first "clock-watches" that were actually small ornamental spring-driven clocks. They were the prototype of all subsequent time-keepers that could be carried on the person, and evolved into the one hand pocket watch.



[5]

<u>Left:</u> A Nuremberg, Germany egg shaped clock-watch "Nuremberg Egg."

They were sometimes worn as pendants on clothing, and this is why they are considered to be the first watches.

Earliest Known 'Dated' Watch: Circa 1530

The earliest dated watch known is engraved on the bottom: "PHIL[IP]. MELA[NCHTHON]. GOTT. ALEIN. DIE. EHR[E]. 1530" (Philip Melanchthon, to God alone the glory, 1530). The watchmaker is unknown but was most likely from Nuremberg, Germany because it is considered the birthplace of spherical watches (called "Nuremberg Eggs").



This timepiece was commissioned by the well-known German reformer and humanist Philip Melanchthon (1497-1560). It is gilt on a brass case with gilt on brass dial and it has an iron movement.

It runs approx. 12 to 16 hours with a single winding, and is accurate to within 30 minutes. The perforations (similar to shrapnel guards on WW1 Trench Watches) allow for one to see the time without opening the watch.

Evolution of Watches: From "Clock-Watches" to Pocket Watches by Randy Jaye

1577: Invention of the Minute Hand by Jost Burgi

Jost Burgi (1552-1632) invented the minute hand in 1577. Burgi's invention was part of a clock made for Tycho Brahe, an astronomer who needed an accurate clock for his stargazing. This led to the development of the minute hand on watches (beginning in the 1600s) which added more accuracy to timekeeping.



<u>Left:</u> Engraving of Jost Burgi – his invention of the minute hand revolutionized timekeeping and significantly increased accuracy in both clocks and watches.

<u>Right</u>: A Thomas Tompion (London, No. 713) pocket watch – pair case (circa 1685-87). By the late 1600s pocket watches had both hour and minute hands as standard design.



Pocket Watches in the early 1600s

Fashion styles changed in the 17th century and men began to carry watches in pockets instead of as pendants (the woman's watch remained a pendant into the 20th century). The introduction of screws in the 1550s enabled watches to gain the modern flatten shape that we know today. A distinctive feature of these early designs was the lack of glass (some watchmakers started using glass as crystals around 1620.) Pocket Watches without glass used metal lids for protection from outside influences.



[8]

<u>Left:</u> Circa 1630 - Puritan Pocket Watch - Pre-Balance Spring – No Glass – One hand -Watches such as this were customary gifts among royalty and the wealthy in the late 16th and early 17th centuries.

<u>Right</u>: Circa 1625-1635 made by Richard Jackson – Oval - One Hand - No Glass -Decorated with a Tudor rose design on the back.



1675: Charles II of England Introduces Waistcoats

In 1675, the new men's fashion style of waistcoats emerged – pocket watches evolved to fit into the pockets of waistcoats. The originator of this fashion style was Charles II of England who popularized this new way of carrying watches across Europe and North America. Pocket watches truly became the luxurious items that received attention from fashion designers and innovators. To fit in pockets, their shape evolved into the typical pocket watch shape we recognize today (rounded and flattened with no sharp edges).



<u>Left:</u> King Charles II by John Michael Wright oil on canvas, circa 1660-1665.

<u>Right</u>: Circa 1690 -Maker: John White -Movement – the large gilt full plate verge movement has large Egyptian style pillars and an oversized watch cock, which is decorated with fine piercing and features finely engraved cherubs.



Pocket Watch Improvements in the 1700s

The only downside of the watches that were made before 1750s was their lack of accuracy – they often loose several hours during one day! Introduction of lever escapement changed all that, enabling watches to loose minute or two during one day. This was improvement finally enabled introduction of minute hands which was not present in previous models.

Up to the 1720s, almost all watch movements were based on the verge escapement, which had been developed for large public clocks in the 14th century. This type of escapement involved a high degree of friction and did not include any kind of jewelling to protect the contacting surfaces from wear. As a result, a verge watch could rarely achieve any high standard of accuracy. (Surviving examples mostly run very fast, often gaining an hour a day or more.) The first widely used improvement was the cylinder escapement, was applied by the English watchmaker, George Graham, early in the 18th century. Then, towards the end of the 18th century, the lever escapement (invented by Thomas Mudge in 1759) was put into limited production by a handful of makers including Josiah Emery (a Swiss watchmaker working out of London) and Abraham-Louis Breguet. These improvements allowed a domestic watch to keep time to within a minute a day.

Pocket Watches After 1857: Standardized Manufacturing Techniques

After 1820, lever escapements became standard in the manufacturing of pocket watch mechanics, (which has not changed even until today), and 1857 was the year in which the first pocket watch was created from standardized parts (the Waltham Model 57 was introduced). Motivated by the Industrial Revolution, such watches soon overflowed the public in Europe and the Americas, enabling most people to buy an affordable, durable and accurate watch. In 1865, the American Watch Company (Waltham) manufactured more than 50,000 reliable watches, and then other companies joined them in the standardized manufacturing technique.



<u>Left</u>: Waltham Model 57, Appleton, Tracy & Co. Grade – Dial View - rare 18K solid gold ornately engraved Double Hunter Case – Presentation piece. (Most of these models were made with Coin Silver cases.) (circa 1865).

<u>Right</u>: Same pocket watch – level escapement movement view.



[11] Evolution of Watches: From "Clock-Watches" to Pocket Watches by Randy Jaye

Winding and Setting Pocket Watches

Key-wind, key-set movements

A watch key was necessary to wind the watch and to set the time. This was usually done by opening the case back and putting the key over the windingarbor (which was set over the watch's winding-wheel to wind the mainspring) or by putting the key onto the setting-arbor, which was connected with the minutewheel and turned the hands.

• Stem-wind, stem-set movements

Invented by Adrien Philippe in 1842 the stem-wind, stem-set movement did away with the watch key which was a necessity for the operation of any pocket watch up to that point.

• Stem-wind, lever-set movements

Mandatory for all railroad watches after roughly 1908, this kind of pocket watch was set by opening the crystal and bezel and pulling out the setting-lever (most hunter cases have levers accessible without removing the crystal or bezel.)

• Stem-wind, pin-set movements

These pocket watches have a small pin or knob next to the watch-stem that had to be depressed before turning the crown to set the time and releasing the pin when the correct time had been set.

How to Determine the Size of a Pocket Watch

Watch movements are measured in an arcane English system of measurement called the Lancashire system or Lancashire Gauge. In this system, 1 5/30th inches is the "base" measurement and is called 0-size. Each 1/30th of an inch adds 1 (or subtracts 1) to this base. A watch is measured through the center of the lower plate of the movement (the dial side). If the movement is asymmetrical, say oval or rectangular, it is measured at its narrowest point. Note that the case is NOT included in this measurement, only the movement. Measuring the dial is usually a fair approximation of the lower plate measurement.

(Table) of Pocket Watch Sizes

Size	millimeters	Inches
000000 (6/0)	25.40 mm	30/30" = 1.0"
00000 (5/0)	26.25 mm	31/30" = 1.033"
0000 (4/0)	27.09 mm	32/30" = 1.067"
000 (3/0)	27.94 mm	33/30" = 1.1"
00 (2/0)	28.79 mm	<mark>34/30" = 1.133</mark> "
0	29.63 mm	35/30" = 1.167"
2	31.33 mm	37/30" = 1.233"
4	33.02 mm	39/30" = 1.3"
6	34.71mm	41/30" = 1.367"
8	36.41 mm	43/30" = 1.433"
10	38.10 mm	45/30" = 1.5
12	39.79 mm	47/30" = 1.567"
14	41.49 mm	49/30" = 1.633"
16	43.18 mm	51/30" = 1.7"
18	44.87 mm	53/30" = 1.767"
20	46.57 mm	55/30" = 1.8 <mark>3</mark> 3"
22	48.26 mm	57/30" = 1.9"

[14] Evolution of Watches: From "Clock-Watches" to Pocket Watches by Randy Jaye

Pocket Watch Types

- Although pocket watches are similar in design they are classified by their type of face display and case configuration. There are seven common types:
- Pair-Case
- Open-Face
- Half-Hunter (a.k.a.: Demi-Hunter)
- Full-Hunter
- Double Hunter
- Half Double Hunter (a.k.a.: Demi Double Hunter)
- Skeleton

Pocket Watch Types: Pair-Case

In the early to mid-18th century, it was common for watches to be housed in "pair cases". A pair-cased watch has an inner case which holds the actual movement of the watch (often a verge fusee), and an outer case which enclosed and protected the inner case. Since the inner case was not dust-proof because of the key-holes for winding and/or setting, an outer case would provide additional protection from dust and dirt.



<u>Left</u>: J. Brown -London - Sterling Silver Pair Case -Verge Fusee movement - Inner and Outer Case view. (circa 1799).

<u>Right</u>: Same Pocket Watch – rear of the inner case has the key-hole for winding the movement.



Pocket Watch Types: Open-Face

 The open-face pocket watch - has no cover and the time can be read without having to remove any obstructions. Open-face pocket watches are quite common nowadays, but were not at all popular in the eighteenth and nineteenth centuries, particularly as the porcelain faces used could be damaged easily and needed the additional protection of a cover.



[17]

<u>Left</u>: Elgin – Open Face -Grade 315 Movement with 15 Jewels - Octagon Shaped Yellow Gold Filled Case - 12 Size (circa 1916).

<u>Right</u>: Illinois – Open Face - Art Deco inspired – 14K White Gold Case (Circa 1917).



Pocket Watch Types: Half-Hunter (Demi-Hunter)

 The half-hunter pocket watch – (also referred to as the 'Demi-Hunter') features a cover that includes a crystal or hole that allows the hands to be seen without having to open it.



J.W. Benson - 54mm in diameter, 14.5mm in thick. Has the London sterling silver hallmarks for 1940 on all covers and serial numbers of "135", matching the movement. (circa 1940).

[18]



Swiss 18K Gold Half Hunter pocket watch with blue enamel numerals. It has a Swiss lever movement. The white enamel dial has a subsidiary seconds dial (circa 1910).

Pocket Watch Types: Full-Hunter

 The full-hunter pocket watch - often featured an ornately engraved outer casing with initials or even a picture or photograph displayed on the inner. Timekeeping, however, could become quite a hassle when the cover had to be opened every time the owner wanted to check the time, and this is why the halfhunter was invented.



<u>Left</u>: Trenton - 18 size -Fancy Dial – Full-Hunter Pocket Watch (circa 1891).

<u>Right</u>: Elgin – 12 size – highly engraved case – Full-Hunter Pocket Watch (circa 1901).



Pocket Watch Types: Double Hunter

 The double hunter pocket watch - has many of the same features as the Full Hunter pocket watch, with the front face of the pocket watch covered with a protective lid, but the difference with a double hunter pocket watch is that there is a lid which opens on the back of the pocket watch also, which is designed so that the mechanical movements of the pocket watch can be viewed, it also makes the pocket watch easy to stand on its own so that the time can easily be read.



<u>Left</u>: Illinois Bunn Special -21J - Highly Ornate Case - Dial Side Case View - all covers open.

<u>*Right*</u>: Same pocket watch – side view of the case with all covers open.



Pocket Watch Types: Half Double Hunter (Demi-Double Hunter)

The half double hunter pocket watch - (also referred to as the 'Demi-Double Hunter') is a combination of the *Double Hunter* and the *Half Hunter* pocket watches, with it having all the features of a double hunter pocket watch which includes having a front and back hinged-lid which fully opens, but the difference is that, like the *Half Hunter* pocket watch, it has a window on the front lid of the pocket watch which then enables you to view the dial of the pocket watch, with the luxury of having a protective covering to prevent the dial from being damaged.



<u>Left</u>: English Sterling Silver Half Double Hunter – Engraved Roman Numerals and chapter ring on the top outer cover (circa 1911).

<u>*Right*</u>: Same pocket watch with all covers open.



Pocket Watch Types: Skeleton

 The skeleton pocket watch is a mechanical watch where all the moving parts are visible through either the front of the watch, and/or the back of the watch. True 'skeletonization' also includes the trimming away of any non-essential metal on the bridge plate, wheel train, or any other mechanical part of the watch, leaving only a minimalist 'bare' skeleton of the movement required for functionality. Often, the remaining thinned movement is decorated with engraving. This can be with or without a dial face that allows the user to see through to the movement.



[22]

<u>Left</u>: Colibri - Swiss - 17J – Gold Plated Skeleton -Full Front View (circa 1980s).

<u>Right</u>: Omega - High grade - lever escapement – 19 jewels – hand polished plates, large balance with compensating weights precision regulator hand engraved balance cock (circa 1900).

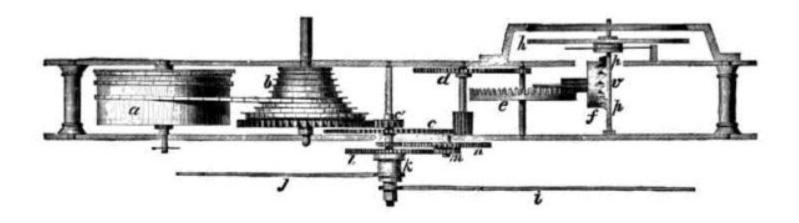


Pocket Watch Movement (Verge Escapement and Fusee)

This type of movement has a verge escapement and fusee. They were used in pocket watches from around 1600 to the early 1800s.

The parts are labeled as follows:

(a) mainspring barrel, (b) fusee, (c) center (hour) wheel, (c') center wheel pinion, (d) third wheel, (e) fourth or contrate wheel, (f) crown wheel, (h) balance wheel (the pallets are also labeled h), (i) minute hand, (j) hour hand, (k,l) cannon pinion, (m) minute wheel pinion, (n) minute wheel, (v) verge.



Pocket Watch Movement (Cylinder Escapement)

Cylinder escapement movement: The escape wheel teeth in this mechanism lie in a horizontal plane, and it was known as the "horizontal escapement" (introduced by George Graham in 1726). The escape wheel usually has fifteen wedge-shaped teeth, standing above the rim of the wheel, the pointed end of the "wedge" leading. The cylinder was particularly popular in 19th-century Swiss watchmaking, because of its compactness and quiet running, both arising from the fact that it had few moving parts.



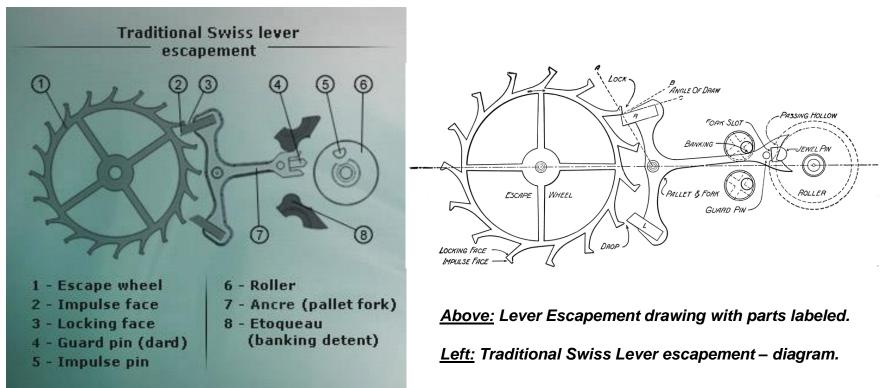
<u>Right:</u> Cylinder escapement - movement - Joseph French - London (circa 1850).

<u>Left:</u> Cylinder escapement movement – Swiss (circa 1880s).



Pocket Watch Movement (Lever Escapement)

Lever escapement movement: Is a type of escapement that is used in almost all mechanical watches. An escapement is a mechanical linkage that gives pushes to the timepiece's balance wheel, keeping it rotating back and forth, and with each swing of the balance wheel allows the timepiece's gear train to advance at a fixed amount, thus moving the hands forward at a steady rate. The escapement is what makes the "ticking" sound in mechanical watches and clocks.



The Dollar Watch

The "**Dollar Watch**" was made in pocket watch and wristwatch configurations and actually sold for about one US dollar. The sale of such watches began in 1892 by the watchmakers Ingersoll, Waterbury, and New Haven. Westclox and the E. Ingraham Company also began manufacturing them in 1899. Trademarks of dollar watches were their simple, rugged design, a movement that had either no jewels or just one jewel, and a width of about two inches. They were made for over 60 years (from 1892 until the mid-1950s). To keep costs down, these watches were often sold in flimsy cardboard boxes, which have become very collectible in today's market. The comic character models of these dollar watches are also very collectible today.



<u>Left:</u> Tom Corbett "Space Cadet" – highly collectible character dollar pocket watch non-jeweled movement - USA Made (circa 1950s).

<u>Right</u>: New Haven – Cascade Model – metal dial – nonjeweled movement – USA Made. (circa 1910).



The Railroad-Grade Pocket Watch

The rise of railroading during the last half of the 19th century led to the widespread use of pocket watches. A famous train wreck on the Lake Shore and Michigan Southern Railway in Kipton, Ohio on April 19, 1891 occurred because one of the engineers' watches had stopped for four minutes. The railroad officials commissioned Webb C. Ball as their Chief Time Inspector, in order to establish precision standards and a reliable timepiece inspection system for Railroad chronometers. This led to the adoption in 1893 of stringent standards for pocket watches used in railroading. These railroad-grade pocket watches, as they became to be known, had to meet the General Railroad Timepiece Standards adopted in 1893 by almost all railroads. These standards read, in part:

> "...open faced, size 16 or 18, have a minimum of 17 jewels, adjusted to at least five positions, keep time accurately to within 30 seconds a week, adjusted to temps of 34 °F (1 °C) to 100 °F (38 °C), have a double roller, steel escape wheel, lever set, regulator, winding stem at 12 o'clock, and have bold black Arabic numerals on a white dial, with black hands."

Railroad-Grade Pocket Watch Makers

There were many famous names that produced quality watches that measured up to the high standards demanded by the guidelines of American railroad system. The following is a list of some of the major manufacturers in the railroad watch business. This list is by no means complete, but it does reflect the major watch brands most sought after by today's avid collectors.

- Ball Watch Co. Cleveland, Ohio (1879 1969)
- Columbus Watch Co. Columbus, Ohio (1874 1903)
- Elgin Watch Co. Elgin, Illinois (1864 1964)
- Hamilton Watch Co. Lancaster, Penn. (1892 Present)
- Hampden Watch Co. Springfield, Mass. and Canton, Ohio (1877 1930)
- E. Howard & Co. Roxbury, Mass. (1858 1903)
- Howard Watch Co. (a.k.a. Keystone) Waltham, Mass. (1902 1930)
- Illinois Watch Co. Springfield, Illinois (1869 1927)
- Rockford Rockford, Illinois (1873 1915)

[28]

- Seth Thomas Thomaston, Conn. (1883 1915)
- Waltham Watch Co. Waltham, Mass. (1851 1957)

Railroad-Grade Pocket Watch Examples

Many Railroad-Grade pocket watches still work up to their original standards, and are one of the most highly sought after collectibles in all of horology.



[29]

<u>Left:</u> Hamilton - 940 Movement – 18 size, 21 jewels - 4 oz Sterling Silver Swing-Out Case – Full Front View. (Circa 1911).

<u>Right</u>: E. Howard -Series O – 16 size, 23 jewels - Full Front View (circa 1916).



FOBs for Pocket Watches

Popular from around the 1830s to around the 1930s watch fobs were medallions or ornaments attached to a pocket watch by a strap, chain, or ribbon to help the wearer locate and retrieve their timepiece. Fobs are decorative, informative, and functional, all at the same time. Designed mostly for men, they are considered "mantiques" today and are very collectible in various markets.



<u>Left:</u> A Sterling Silver Articulated Watch Chain Fob in the Form of a Court Jester (the bottom chain moves the arms and legs when pulled.) (circa 1860s).

<u>Right</u>: Hard rubber watch chain Fob advertising Swift's Premium Ham. Colored and shaped to look like a store-bought processed ham. (circa 1920s).



Pocket Watch Keys

From the 16th century up until the third quarter of the 19th century pocket watches had key-wind and key-set movements. A watch key was necessary to wind the watch and to set the time. This was usually done by opening the case back and putting the key over the winding-arbor (which was set over the watch's windingwheel, to wind the mainspring) or by putting the key onto the setting-arbor, which was connected with the minute-wheel and turned the hands. Some watches of this period had the setting-arbor on the front of the watch, so that removing the crystal and bezel was necessary to set the time. Pocket watch keys have become collectible items that reach beyond the confines of horology.



<u>Left:</u> A solid yellow gold pocket watch key with fancy engravings (circa 1880s).

<u>Right</u>: An advertising pocket watch key made for Stoll & Funck Jewelers, Lebanon, PA (Patented: Sept. 1, 1874).





Chains for Pocket Watches

Chains for pocket watches have practical purposes as they serve as a method for grasping and removing the watch from a pocket. They also serve as a safety or security device that prevents the watch from falling to the ground if it should come out of one's pocket. There are 3 common types: **Double Albert**, **Single Albert** (or Half-Albert) and the **Spring-Ring** (or **Ring-Clip**).



A Double Albert is characterized by having two equal lengths of chain hanging from a central T-bar.

[32]



The Single Albert or Half-Albert was the descendant of the Double Albert. This kind of chain became popular in the latter decades of the 19th Century, when keyless watches were invented. Both styles of Albert chains are designed to be worn with a waistcoat and with the Tbar going through a buttonhole.



The Spring-Ring or Ring-Clip watchchain is another common design. Spring-Ring chains are usually longer than Albert chains (apart from maybe, Double Alberts), and they are attached to watches which are worn in the watch-pocket of trousers. The ring is clipped around the belt-loop of trousers and the watch goes into the watch-pocket.

Watch Pockets 'Fifth-Pocket' in Trousers or Blue-Jeans

Did you ever wonder what that extra pocket on trousers or blue-jeans is supposed to be used for? It is called the 'fifth pocket' and was created in the 1870s by Levi Strauss, the jeans manufacturer, and its original purpose was to hold a pocket watch. Despite the fact that the pocket watch is rarely used by the general public today, the 'fifth pocket' remains as an enigmatic and puzzling leftover from yesteryear.



<u>Left</u>: A pair of blue-jeans with a pocket watch ('fifth pocket') with a secure Spring-Ring chain attached to a belt loop. This is the intended use of a 'fifth pocket'.

The Modern Pocket Watch

Interest in Pocket Watches is on the rise in recent years. And, as remarkable as it may seem in a world overrun with Smartphones and other high-tech gadgets, there are a handful of watch manufacturers (including Hamilton, Panerai, Omega, Patek Philippe, Tissot, Orient and Cartier) that never stopped making pocket watches and a number of others (including Nixon and Charles-Hubert) that have recently introduced stunning new models in all price ranges.



[34]

<u>Left</u>: Richard Mille titanium RM-020 pocket watch features a tourbillon complication and a movement plate made of carbon nanofibers. Starts at \$547,000 (circa 2013).

<u>Right</u>: Nixon – Highball - 3 Hand self-winding mechanical movement with sweeping seconds sub dial. Starts at \$300.00 (circa 2010).



The 'Steampunk' Movement

Steampunk is a sub-genre of science fiction that typically features steampowered machinery especially in a setting inspired by the industrialized Western civilization during the 19th century. Steampunk works are often set in an alternative history of the 19th century's British Victorian era or the "Wild West" of North America. The first Steampunk convention took place in 2006: and the word was actually added to The Oxford English Dictionary in 2010. It is just recently hitting the media and the mainstream.



[35]

<u>Left</u>: Steampunk costumes - 19th Century leather clothing and Industrial Age Accessories (circa 2013).

<u>Right</u>: Steampunk commonly highlights the post-apocalyptic designs from the golden age of Victorian era and consists of heavy themes of steampowered machinery. (circa 2014).



The 'Steampunk' Movement Pocket Watches and Watch Jewelry

The **'Steampunk**' movement uses vintage pocket watch movements and parts to configure jewelry. The pocket watch is the movement's timepiece of choice. Modern pocket watch makers have started to produce models that comply with the movement's fashion. Many modern pocket watches are made with quartz movements and hung around the neck with a chain. Vintage pocket watches are also part of the movement's fashion statements due to their Victorian era connections.



<u>Left</u>: The watch mechanism is adorned with an antiqued gold, highly detailed dragonfly, that was hand set with two vintage steel watch gears, Swarovski crystal faceted stones and an antiqued gold flower with a watch gear and a Swarovski crystal stone (circa 2013).

<u>Right</u>: Steampunk - Half-Demi Pocket Watch with pendant chain - Quartz -Victorian Style (circa 2014).



The End

The 'Pocket Watch' you will never lose or misplace?

