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The following is a summarization of discussions which occurred on the E-mailing list (listserver) Clocks. To join in this and other horological discussions please join the mailing list Clocks or Clocksmiths.

This list was compiled by Parnav Singh (singhp@sunrise.cs.jmu.edu) and downloaded from the E-mailing list Clocks. Please see the file csignup.mcc for details on how to join this mailing list.

Chronology of the Development of Watches
1470 First spring driven watch
1470 Fusee introduced in Italy
1500 Spring-driven, drum-shaped table clock
1505 Peter Henlein makes the first watch
1510 Stackfreed introduced to control tension in the mainspring
1520 Brass used in France to make watches
1525 Jacob Zech introduces his fusee
1550 Screws used in metal

1575 Balance wheel is introduced

1600 First watches are produced in London
1610 Enamel cases come into vogue
1630 Watch glasses are first used

1635 Paul Viet uses enamel dials
1650 Round watch cocks are used
1658 Robert Hooke invents the "straight" balance spring

1665 Watch fusees made of chain instead of gut
1674 Christian Huygens invents the spiral balance spring
1676 Motion works and minute hand introduced by Daniel Quare
1680 Second hand introduced
1694 Nicholas Facio first uses jewels in watches

1695 Cylinder escapement used by Thomas Tompion
1710 Dust caps invented
1715 Oil sinks invented by Henry Sully
1720 English Hallmarking used on silver cases
1722 Rack lever escapement invented by Abbe de Hautefeuille
1734 First bimetallic compensation invented by John Harrison
1750 Watch makers in America begin production
1750 White enamel dials are in general use
1770 Engine turning for decorating watch cases
1775 Thomas Harland of Norwich, Connecticut makes watches
1780 Pocket watches are made thinner than ever
1780 Automatic winding is invented by Abraham Louis Perrelet
1782 Isochronism introduced by John Arnold
1785 Draw applied to lever
1800 Single cases replace the pair cases
1801 Tourbillion watch made by Abraham Louis Breguet
1809 Luther Goddard makes watches
1820 Keyless winding introduced by Thomas Prest
1833 Antoine Le Coultre establishes his watch factory or workshop. It is here where all the company's cases and movements are still made by hand.

1835 First Pitkins watches produced
1842 Watches could be set by hand instead of key
1842 Jacob Custer watches made
1844 Antoine Le Coultre invents the millionometer enabling the world to make measurements exact to a thousandth of a millimeter.

1847 Le Coultre presents the world's first movement with a crown winding mechanism. This signals the demise of the key wound watch.

1850 Howard and Dennison produce the first Waltham watch
1852 First Boston watch produced
1853 First factory-made watches are sold
1857 Boston Watch Co. fails
1857 First American watch to use a quick-train
1859 Appleton Tracy and Waltham merge
1866 First American-made railroad watch produced for the Railroad company

1868 First American stem-wind watch
1876 Henry Abbott patents his stem winding attachment
1877 Auburndale Rotary sells for $\$ 10$
1878 Double-roller used by the Adams and Perry Co.
1878 First dollar watches produced for \$3.50
1880 Watches are produced in huge quantities compared to earlier hand-made ones

1883 Seth Thomas decides to produce pocket watches
1885 New York Standard produces its first pocket watch
1892 First watch to sell for $\$ 1.00$ by Ingersoll
1893 First watch produced with the Hamilton label
1898 First 23J watch made by Hampden Watch Co.
1900 Wrist watches come into vogue
1903 Le Coultre achieves its dream of making the slimmest watch movement in the world. This mechanical miracle is only 1.38 mm thick, while even the much more complicated chronograph is only 2.88 mm thick.

1904 Ansonia begins to produce watches
1908 Wilsdorf coined the name Rolex.

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1908 Premier Maximus introduced at $\$ 250.00$
1910 A Rolex movement was sent to the School of Horology in Switzerland.

It was judged to be excellent and was awarded the world's first wrist watch chronometer rating.

1910 First electric watch for Burgess Battery Co. (labeled Corona Watch Co.)
1915 Seth Thomas ceases watch production
1926 The 1st waterproof Rolex rolled off the assembly line. The Rolex Oyster Case was born. To further insure the safety of this marvelous movement Wilsdorf created a screw down crown using a twin lock system.

1926 Le Coultre develops the Duoplan, a watch whose accuracy is way ahead of its time.

1927 All Rolex watches carried the name inside the case, on the movement and the dial.

1927 Buster Brown pocket watch
1928 The Rolex Prince, became a best seller with its dual dial and rectangular case.

1928 An engineer at Le Coultre by the name of J. L. Reutter devises the first Atmos clock. This table clock does away with the need for winding - it derives all its power from minute fluctuations in room temperature.

1929 Le Coultre enters the record books with the smallest watch movement of all time. It measures $14 \times 4.8 \times 3.4 \mathrm{~mm}$ and weighs less than a gram.

1929 New York Standard fails
1931 Rolex invented the "Rotor" - a semicircular plate of metal that with gravity, would move freely to wind the watch. Thus, the Rolex Perpetual (automatic) movement was born.

1931 Le Coultre unveils the Reverso. A classic from the beginning the Reverso has a rotating mechanism which allows the watch to be rotated 180 degrees protecting the crystal and dial from damage. It was one of the first watches to be equipped with built in shock resistance.

1933 Mickey Mouse pocket watch
1945 Rolex introduces the 1st watch to display a date on the dial.
1952 Rolex introduces its first diving watch. Later this watch is renamed the Submariner.

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1953 Jaeger - Le Coultre makes history when it unveils the Futurematic. The world's first fully automatic watch without a winding crown.

1954 Rolex introduces the first ladies oyster perpetual watch.
1956 Rolex introduces the President model. The first oyster watch that also has
a day/date feature. The first model produced was presented to President Eisenhower.

1957 Hamilton makes the first electric wrist watch
1959 Bulova Accutron tuning fork wrist watch introduced
1969 Last pocket watch made by Hamilton
*** END ***

I want to thank Pranav Singh for unselfishly sharing all of his hard work.
A service from, E-mail address: Mike@atmos-man.com Mike Murray Founder of Clocksmiths

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