

The Invention of 5 Objects

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The modern wristwatch was an improvement on the previous invention, the pocket watch. The first wrist watch was created by a Swiss pocket watch manufacturer Patek Philippe in 1866. The watch was made for the Countess Koscowicz of Hungary as a fashion accessory, rather than an important tool to tell time. It wasn't until later in the 19th century that the pocket watch was produced for convenience rather than style. Officers in the German Imperial Navy complained of the inconvenience of reaching for a pocket watch during a battle where speed was of the utmost importance. An unknown officer proposed the idea of strapping the watch to your wrist. His superiors approved of this request and the watchmaker Girard Perregaux created what is thought to be the first example of the use of wrist watches by men. These wristwatches became an essential tool for many militaries and their designs were further innovated as armies continued to use them into the early and mid 20th century. These military wrist watch designs eventually developed into the styles of watches that everyday men and women wear today.

<https://www.nytimes.com/2013/10/23/fashion/wrist-watches-from-battlefield-to-fashion-accessory.html>

The first modern classical guitar was created by the Spanish guitar maker Antonio Torres in 1850. His design was inspired by the Moorish Lute or Oud, which he altered by changing the proportions and increasing the body size along with other adjustments. He also changed elements of the bracing in the guitar vastly improving the volume and tone of the instrument. Torres

guitars string were still made out of natural materials such as the intestines of sheep. In the United States at a similar time. Christian Frederick Martin began creating the first steel stringed guitars. He decided to use steel to allow Banjo players, who used steel strings, to be able to easily adjust to the design of a guitar. His bracing system varied from Torres' to ensure that it was strong enough to hold up against the tension created by the steel strings used.

<https://www.thoughtco.com/history-of-the-acoustic-and-electric-guitar-1991855>

https://www.yamaha.com/en/musical_instrument_guide/acoustic_guitar/structure/

The modern stove-top kettle with its loud whistling sound was created to improve upon previous kettles that didn't have a method of signalling when the water was ready. Tea kettles have been used for thousands of years, the first known design being dated back to Mesopotamia. The original designs looked quite similar aesthetically but were initially made to be hung over a fire before the invention of the stovetop. They are widely considered one of the first common kitchen appliances and allowed people from all classes to purify their water through boiling. The boiling of water for purification further led to the development of different teas by many cultures that experimented with adding flavouring to the boiled water. It isn't entirely known who finally invented the whistling tea-kettle. Many people believe that Sholom Borgelman, the owner of a sheet metal company, invented the whistling kettle after World War One. However, there are two patents of similar designs involving whistles, Charles E. Coats' "Tea-Kettle" and Jorgen Madsen's "Combined Tea-Kettle and Signal" that date back as early as 1890. Which of these designs is most similar to our modern whistling tea kettle is unknown. The whistle sound made

by the tea kettle is caused by the vibration of steam in the kettle as it attempts to escape. As the water heats up, so does the speed of the vibration, eventually leading to the loud whistle that we all recognize, signalling your water is ready. This signal allows the user to know at the earliest time when the water can be used. It also ensures that the water is not forgotten about and left so long that it evaporates.

<https://blog.englishteastore.com/2014/01/13/who-invented-the-tea-kettle-whistle/>

<https://www.cam.ac.uk/research/news/how-the-kettle-got-its-whistle>

<http://inthekitchen.org/history-tea-kettle/>

Despite their current use alongside modern phones, laptops and tablets, headphones were used far before the inventions of these devices. One of the first known uses of headphones was by telephone operators for radio communication in the late 19th century. A French Engineer named Ernest Mercadier created in-ear headphones to be used by telephone receivers. This improvement made the telephone receiver hands free. The earbuds were lightweight, weighing only 1.75 ounces and had rubber covers similar to the ones today to make the earbuds fit comfortably in the ear and decrease friction that could affect the sound quality. Over the ear headphones were later seen in Opera theatres in London. Invented by a British company called Electrophone in the 1890s these headphones were used by audience members to hear the Opera singers from a further distance by being connected to a live feed of the show. Like many other common objects, improvements in the design of earbuds were made when they began to be used by the military in the 20th century. A man from Utah name Nathaniel Baldwin sent a pair of prototype handsets to

the military for testing in 1910. The Naval radio operators found this model to be vastly better than the headset they were currently using and they requested more earbuds to be sent by Baldwin for testing. They later gave Baldwin suggestions on ways to improve the design and later advised Baldwin to patent the design so they could be mass produced for military use. Over time earbuds and headphones were used in many different areas and adjustments were made to make them more comfortable and produce better sound quality. With the invention of devices such as the Sony Walkman and later the iPod they eventually became common among every day citizens and today many different brands and designs exist.

<https://www.smithsonianmag.com/arts-culture/a-partial-history-of-headphones-4693742/>

Watercolour paint is one of the most widely used and accessible forms of paint today.

Watercolour paints were first either bought in liquid form or created by the artists themselves from ground up natural pigments. This was inconvenient for most artists who painted outdoors.

In the late 18th century the first version of solid watercolour paints were created by William Reeves. These small water soluble cakes of pigment could be purchased by artists who could then dip the cake in water and place it on some sort of “palette”. Around the same time stores began to sell paintboxes inspired by many artists who carried their own cases filled with compartments for separate colours, brushes and other supplies. Watercolour paints were often used outdoors to paint nature and these boxes made the paints more portable and convenient.

These boxes became increasingly popular with the invention of the cake watercolour with boxes being sold ready made. Although many boxes were luxurious some inexpensive alternates were

created, increasing the number of amateur artists who used watercolour paints. The first watercolour paints that came in a paste like consistency we see today were produced in the 1830s and sold in porcelain pans. Inspired by tubed oil paint, the paint company Windsor and Newton, still popular today, began selling the new “moist” watercolours in metal tubes in 1846. The paints were simpler to use and took far less time to dry than oil paint. The many advancements over time in the production and marketing of watercolour paints caused them to be more accessible and popular among amateur artists.

https://www.metmuseum.org/toah/hd/bwtr/hd_bwtr.htm