

Striking the RIGHT NOTE

*Here is a melody trip through the
fascinating world of musical watches*

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The sleepy town of Montreux in Switzerland is shaken out of its slumber in the month of July, when it gets the much-needed annual dose of jazz and blues music. The Montreux Jazz Festival, held here since 1967, has witnessed music icons such as Miles Davis, Led Zepelin, Pink Floyd, Deep Purple and Eric Clapton. It is the world's second largest jazz festival, after Canada's Montreal International Jazz Festival.

But this gala is not the only reason putting Switzerland on the world music map. The country's musical sojourn

dates back to the era when music boxes and automata were the order of the day. And, modern musical wristwatches seek constant inspiration from those technical marvels, which were created for the royalty.

Long before dials were created, time was noted by the striking of bells or chimes and that led to the invention of the first bell tower with large gongs producing musical notes in the 14th century. German inventors Hasler and Heinlein, who presented emperor Rudolf II with the first automatic musical clock in 1601, tried to emulate the same idea, working on a smaller version, which was a tougher feat.

The ancestors of the modern musical timepieces—the music boxes and automata—were made immensely popular in the late 18th century, thanks to the Swiss watchmaking skills. The music box industry employed over 1,00,000 artisans in Europe and America during that period.

That phase saw people buying musical marvels in various forms such as jewellery boxes, snuff boxes, winding

toys and clocks, in which the melody mechanism was created using a small, tuned-steel comb strummed by pins or pegs set in a cylinder. Though the simple music boxes played only basic notes, they flourished until the late 1880s, when they were replaced by the interchangeable disc music box created by Paul Lochmann of Leipzig, Germany.

His invention contained circular cardboard discs, which when struck with goose quills, produced symphony. It earned a patent in 1886. However, Thomas Edison's invention of the phonograph in 1877, which played back recorded sounds had already created a stir in the music box industry. And with consecutive enhancements of this machine, the era of the musical boxes gradually waned through the 1900s.

While recalling the glorious days of music boxes and automata, Jaquet Droz is a name to reckon with. In the early 18th century, Pierre Jaquet Droz, a clockmaker from La Chaux-de-Fonds, Switzerland, started contributing to marketing strategies for high-end watchmakers.

In the process, he and his son, Henri-Louis, created a set of three automata dolls—The Writer, The Draughtsman and The Musician. As the names suggest, the automata were capable of drawing pictures, writing customised text and playing music.

These novelties were invented with a view to cater to the royalty and were more like self-operating toys that were wound to perform tasks. The automata dolls are still functional, and can be seen at the Musée d'Art et d'Histoire of Neuchâtel, in Switzerland.

The brand presented The Charming Bird at Baselworld 2013, a follow up to the Bird Repeater, unveiled in 2012. The watchmaker introduced an automaton that can sit neatly on one's wrist, enclosed in a 47mm white-gold case. The transparent sapphire crystal dial forms the backdrop against which the miniature blue-toned songbird is placed, and every little detail of the bird's anatomy has been taken care of. The bird flaps

THE ANCESTORS OF THE MODERN MUSICAL TIMEPIECES—THE MUSIC BOXES AND AUTOMATA—WERE MADE IMMENSELY POPULAR IN THE LATE 18TH CENTURY

its wings, moves its head and tail, and opens up its beak to chirp. The model is limited to 28 pieces.

Ulysse Nardin too, has been carrying on the legacy of music boxes with their version of musical watches such as Genghis Khan, launched in 2002—the world's first wristwatch featuring a Westminster chime with minute-repeater, automata and a tourbillon. It plays the melody of London's Big Ben. The brand repeated the feat in 2011,

by launching the Alexander the Great masterpiece.

This year, at Baselworld, it launched Stranger, a watch with a musical soul. It plays Frank Sinatra's famous musical rendition 'Strangers in the night', and emulates a classical music box. The watch plays the song either on the hour or on call. This innovative watch bears the signature of Ulysse Nardin's partner and musician, Dieter Meier, who became a shareholder in 1983.

Manufactured in a limited edition of 99 pieces in rose-gold, this mechanical self-winding musical watch incorporates silicium technology for the escapement and its in-house manufactured UN-690 movement, which can be admired through the sapphire crystal. To set the time, the crown function is activated by a pusher instead of a traditional crown. This pusher, located at 10 o'clock, also enables the musical mechanism to be activated or deactivated.

Breguet, known as the inventor of the tourbillon, has a top spot in the world of timepieces based on musical boxes. The Classique La Musicale 7800 launched last year underlines the brand's connection with music and European art and culture.

This rose-gold watch is fitted with Breguet's self-winding 777 calibre with a silicon escapement and balance

Breguet's Classique La Musicale 7800



Girard-Perregaux's Opera Three

Musical Watches

spring. Press a button at 10 o'clock, and it plays Johann Sebastian Bach's Badinerie. This has been achieved with a mechanism similar to that of a musical box, except that instead of the traditional cylinder, it has a disc with pegs that strike on the 15 blades of the keyboard.

A second innovation amplifies the sound so that the tune can be heard without sacrificing water resistance. The watch is also fitted with a patented magnetic mechanism, which consists of isolated magnets in a cage, reducing unwanted sound and wear and tear. It also ensures that the melody proceeds at the right tempo, enhanced by a system supplying enough energy to play the entire tune.

Last year, Jaeger-LeCoultre unveiled its Hybris Mechanica à Grande Sonnerie, which comprises 1,406 parts, enabling it to play the entire Big Ben chiming sequence. It was released as part of the Hybris Mechanica 55 trilogy, a series of watches that comprised 55 complications.

The 44mm white-gold case houses the movement, which is just 10.40mm thick and 37mm in diameter. The open-worked dial allows one to observe the Grande Sonnerie hammers in action. The retrograde hands display the perpetual calendar indications, the independent power reserves, the striking



Jaquet Droz's Charming Bird (above and left) The famous automata: The Draughtsman, The Musician and The Writer (below)



mechanism and the striking-mode indication by means of a pivoting disc. Winding the crown clockwise generates a 50-hour power reserve and winding it anti-clockwise stores the power required to keep the Grande Sonnerie mechanism operating smoothly for 10 hours.

The two barrels are integrated within the dual-wing concept, the characteristic feature of the Duomètre line, in which one gear train is dedicated to the timing device and another to an additional function, which in this case is the musical indication.

The wearer of the watch may decide at any time whether he wishes his timepiece to perform the inherent functions of a Grande Sonnerie (hours and quarters), Petite Sonnerie (hours only), minute repeater (hours, quarters and minutes) or to keep silent. A push-piece at the centre of the crown activates the repeater function on demand. To improve the function as well as the quality of the sound, Jaeger-LeCoultre has incorporated a special mechanism chris-



Jaeger-LeCoultre's Hybris Mechanica à Grande Sonnerie

tened the 'Trébuchet' system.

Italian brand Bulgari, known mostly for its feminine and jewelled timepieces, also jumped on the musical bandwagon by introducing three limited-edition minute-repeater watches at Baselworld last year. The collection named Commedia del'Arte—fitted with automata dials—pays tribute to Italy's theatrical history and each model is limited to just eight pieces.

The collection's theme and name are derived from 16th century Commedia del'Arte, a nomadic, improvisational style of street theatre staged by masked performers. The three famous masked characters depicted on the watches are Brighella, Pulcinella, and Harlequin.

The dials' backgrounds depict contemporary Italian palaces with a Venetian, Bolognese, or Neapolitan decor. These timepieces are powered by Bulgari's in-house Calibre BVL 618, equipped with a Cathedral Gong minute-repeater (operated by a slide at 10 o'clock) with two hammers, along with

a jumping hour and retrograde minutes display. When the watch chimes, the characters on the dial move in choreographed patterns, giving the impression of them dancing and playing various musical instruments.

Inspired by the melodies of the opera, Girard-Perregaux launched its Opera Three in 2010. The mechanism of this timepiece works on the principle of a music box and emulates a miniature carillon with a keyboard of 20 blades and a drum set with 150 hand-assembled pins. When it turns, the drum lifts the keyboard keys, to play a complete melody. Opera Three has a small lever on the side of the case for choosing

between two melodies—Mozart's A Little Night Music or Tchaikovsky's Swan Lake.

One also has the option of customising a tune of personal preference. Another lever with three positions can disconnect the sound, make the melody play upon demand or activate it for each hour. The dial is characterised with a small second at 6 o'clock and two indicators—the power reserve of the carillon and the selected melody.

Opera Three stems from the brand's expertise in musical watches, which began in the 19th Century, when Genevan watchmaker Jean-François Bautte, with whom the origins of Girard-Perregaux are associated, made "de luxe" pocketwatches with repeater chimes. O

Bulgari's Brighella timepiece from Commedia del'Arte collection

