

IMAGINING A MASTERPIECE

Karl-Friedrich Scheufele, president of Chronométrie Ferdinand Berthoud, talks about creating the new 'young-old brand' under the Chopard group umbrella and the challenge of engineering a wristwatch worthy of its master clockmaker namesake

| BY JAMIE NONIS |

Launching a new luxury watch brand in an underwhelming economy can be quite a gamble. But when your name is Karl-Friedrich Scheufele, it is almost impossible to get it wrong.

The 59-year-old hails from the illustrious Scheufele family, which has owned luxury jeweller and watchmaker Chopard for more than half a century. He shares custody of the brand with his sister Caroline as co-presidents of Chopard. Each is responsible for the men's and ladies' collections respectively.

With his love for mechanical intricacies and technical details, Scheufele added a new role to his portfolio — as president of Chronométrie Ferdinand Berthoud in 2015, when the Chopard Group launched the new ultra-exclusive watch brand in homage to its watchmaking wunderkind namesake from the 18th century. The group first acquired the rights to the Ferdinand Berthoud name in 2006 but it lay dormant for the first five years before R&D began in 2010.

Widely acclaimed watchmaker-scientist

Swiss-born Ferdinand Berthoud was an extraordinarily gifted 18th century horologist who earned the title of Watchmaker and Mechanic to the King and Navy of France for his exceptionally precise marine chronometers.

"What I found fascinating was the fact that he was eager to share his knowledge whereas most of the watchmakers of his time were keeping everything to themselves. He wrote an immense amount of literature and the more I read about his work, the more fascinated I became," shares Scheufele, who learnt of the watchmaker-scientist through his discovery of antique Berthoud pieces while pursuing his hobby of clock and pocket watch collecting.

Berthoud was born in Val-de-Travers, 10 minutes from the Swiss town of Fleurier where Chopard's manufacture is located, to a distinguished family of clockmakers. At the age of 18, he moved to Paris to study clockmaking and, seven years later, published his research at the French Academy of Science by submitting the description of a new construction in a sealed envelope. The academics' approval of his longcase equation clock, considered highly ingenious at the time, marked the beginning of his career as a researcher and, at the same time, enabled him to integrate within the watchmaker community.

The accolades came quickly for this visionary inventor who published several reference papers and a two-volume horological treatise during his career, which enabled him to rapidly make a name for himself in the scientific world of his time.

At 26, Berthoud was bestowed the title of Master Clockmaker by decree of King Louis XV's council. In 1764, he was elected to the Royal Society in London as an associate overseas member for his masterpieces and his publications about watchmaking.

Known to be a tenacious investigator and skilled and daring builder, Berthoud creat-



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ed several marine chronometers including N° 6 and N° 8. Their successful sea trials earned him the title of "Horologist mechanic to the King and the Navy" as well as a royal command for 20 marine chronometers for the French admiralty's charting expeditions and marine surveys of the late 18th century.

In 1804, Berthoud's career culminated in the ultimate accolade when Napoleon I made him a Knight of the Legion of Honour as a member of the Institut de France at age 77.

Berthoud made an indelible mark on history with his remarkably accurate marine chronometers capable of measuring longitudes to within less than half a degree. The chronometers he developed enabled France to vie with England for maritime supremacy.

Capturing the visionary spirit of such a pioneer was therefore a most delicate feat for Scheufele and his team.

"We have a major responsibility in bringing the legendary Ferdinand Berthoud back to the forefront of the watchmaking scene. Our goal is not to develop nostalgic commemorative models, but instead to offer contemporary watches that will prove worthy of the great name they bear and of the excellence that they legitimately inspire," explains Scheufele.

Engineering a revival

While resurrecting a centuries-old brand is not uncommon in the Swiss watchmaking world, the challenge in reviving the Berthoud name and honouring the legacy of his life's work was especially tricky considering the master clockmaker had never made a wristwatch.

Scheufele says the answer lay in one question: "What would a wristwatch look like if Berthoud were to make one?"

The quest began with a blank slate. Well, almost.

"We created a lot of sketches and designs based on the underlying philosophy that Berthoud was always ahead of his time. So how should the watch integrate some of the architecture of his previous movement constructions yet look contemporary on the outside?" Scheufele says.

Scheufele was hands-on in the creative process, with pencil in hand at times, assisting in and overseeing the design, development and construction of the very first Ferdinand Berthoud wristwatch.

The result is the visually stunning FB 1, infused with the same ethos of innovation and precision exemplified by Berthoud's early work.

The FB 1 is an entirely new creation, not simply a reproduction of a past model bearing the Berthoud name. It is not an exercise in nostalgia but an exercise in imagination — a contemporary translation of the man's genius.

The watch is powered by the Calibre FB-T.F.C., a new hand-wound movement designed, developed and produced by Chronométrie Ferdinand Berthoud itself, through a creative process separate and independent from Chopard. Specific watchmakers were hired to develop the original calibres and exteriors of the Ferdinand Berthoud pieces, with additional expertise buttressed by the Chopard manufacture.

"We were lucky to have the help of the manufacture, which has the technical capacities to build and produce all the components and prototypes needed. For a project like this, you have to produce a number of prototypes until you are perfectly sure that everything works well. The same goes for the watch case, which is made in-house, so we are really self-sufficient," says Scheufele. "I have not made

a complete run-down [of costs] but I estimate the investment should be a few million Swiss francs. Now, if Chronométrie Ferdinand Berthoud did not have access to all these facilities, it would have been much more expensive."

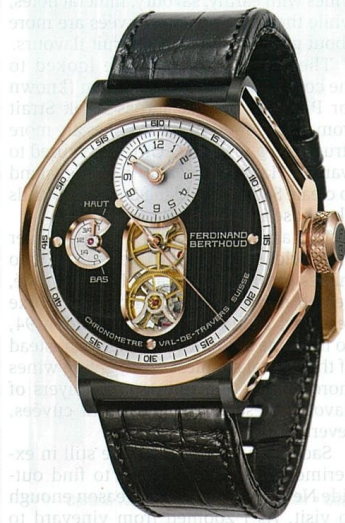
The main source of inspiration for the FB 1 is Berthoud's marine clock M.M. N° 6 from 1777, which is driven by a movement equipped with a constant-force module, an astonishing (for its time) fusée-chain transmission system, and superb pillar-based construction — three features that are reprised in the FB 1 but styled and engineered for contemporary times.

"It's really a modern interpretation; modern technology interpreting an architectural movement that dates back more than 250 years," Scheufele assures.

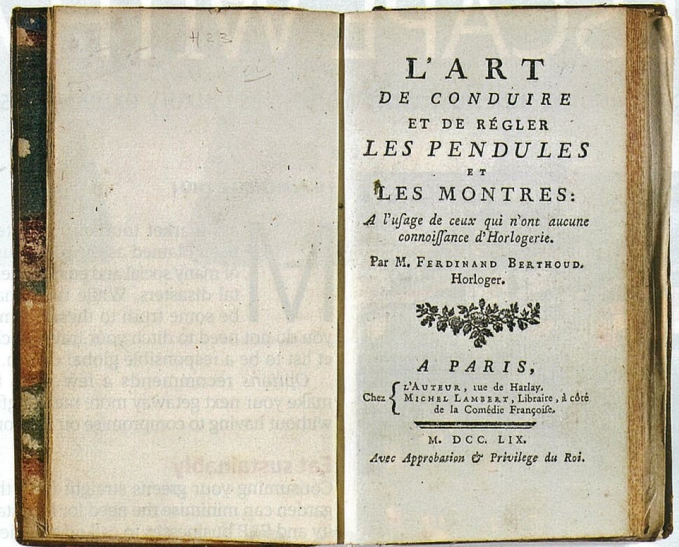
Comprising 1,120 components, Calibre FB-T.F.C. is a result of three years of painstaking R&D and prototyping. Several patents have been filed for the innovative and unusual construction of some of its features: a tourbillon with a central seconds wheel that drives the tourbillon carriage below it, distinctive pillar-type architecture in titanium, suspended fusée-chain regulating system, and mobile cone indicating power-reserve.

The fusée-chain systems characteristic of 18th century timepieces served to compensate for the variations in torque of the mainspring according to the degree of winding. With the FB 1, the innovative fusée-chain mechanism occupies an exceptionally small space at the heart of the movement, thanks to its "suspended" construction secured to the mainplate. The barrel and the fusée are linked by a 28cm-long chain and when the mainspring is associated with a fusée (spindle-like element), the barrel drum turns in one direction when the spring winds down, and in the opposite direction when it is wound up. The rotation of the drum causes the chain to coil around the fusée. To ensure the movement does not stop during winding, the Calibre FB-T.F.C. is equipped with an unusual differential gear. The barrel itself is linked to the Maltese cross stopwork device that serves to limit the number of winding turns of the mainspring and to ensure pre-determined, constant-force transmission during the letting-down process.

"The challenge was in making the movement as precise as can be — while representing the past elements. If we want-



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ed to take a straight road, we probably would not have built a movement this way. And the fact that we created this movement to tick at 3Hz while modern movements tick at 4Hz — we made it more difficult for ourselves to achieve precision but that is part of the fun," says Scheufele with a smile.

Just as innovative is the power-reserve mechanism, inspired by the one created by famous British watchmaker George Daniels, and a nod to the ties with England cultivated by Berthoud in his day. The FB 1's mechanism is directly linked to the barrel by a driving wheel and uses the winding and letting-down motion of the mainspring to make a truncated cone move up and down along an arbor secured to the mainplate. A mobile arm tipped with a roller jewel serves as a feeler-spindle in measuring the motion of the cone and transmitting the movement's power-reserve level to a dedicated hand, endowing the watch with a 53-hour power-reserve.

This remarkable movement is housed in a 44mm octagonal-shaped case inspired by the marine chronometers developed by Berthoud. On the side of the case, four lateral sapphire portholes offer a peek at the subtle intricacies of the movement ticking within.

So extraordinary is the technical savoir-faire of this masterpiece that it was conferred the "Aiguille d'Or" at the 2016 Grand Prix d'Horlogerie de Genève (GPHG), considered the greatest authority on global watchmaking and judged by a panel of 27 experts.

"We received the first prize, the highest prize you can win. This was really an amazing recognition for a 'young-old brand'," says Scheufele, appreciative of the honour that arrived in October 2016, only one year after the official launch of the brand and with a sole model to speak of.

World of art and beauty

To say that Ferdinand Berthoud timepieces are exclusive is an understatement. The manufacturer only began delivering the first pieces of the FB 1 last June — 15 pieces, to be precise — and half had already found a home in the treasure troves of discerning collectors around the globe by the time of this interview at the end of 2016. In total, only 100 pieces of this extremely limited series will eventually be produced — 50 pieces in 18-karat

white gold and titanium, and another 50 in 18-karat rose gold and black ceramic.

"I would have preferred to launch it when the economy was on the up or at a more interesting level, but we had been working so hard on the project and we were ready to launch so we did not really think twice about launching or not launching. Also because our reasoning is we're addressing very few collectors, very few discerning watch lovers, and we figured that we would find enough clients around the world for the few pieces we were planning to make and this proves to be correct," says Scheufele.

In any case, a project like Berthoud lives in "the world of art, the world of beauty, the world of collectors; it's not a completely rational world", he theorises.

Berthoud watches may inhabit the highest echelon of luxury but Scheufele resists classing them as such. "I don't even like the word 'luxury' in relation to Berthoud. It's more like the top end of quality; the high-quality sector is less affected [by economic fluctuations]. A rare species like a Berthoud watch is so outstanding that it finds clients for this type of timepiece," he says.

Distribution of the timepieces is naturally just as exclusive, with only three points of sale in Europe — Paris, London and Geneva — and another three in Asia — Tokyo, Hong Kong and Singapore — as well as one in the Middle East in Dubai. Given the limited quantities and production capacity, the brand is "not in a hurry" to supply to the US market.

Incidentally, you will not find Ferdinand Berthoud watches in any of the Chopard boutiques around the world, as Scheufele is intent on drawing a clear distinction between the two brands.

Instead, Berthoud will be "represented with other niche brands that correspond in terms of positioning", he says.

Recalling an occurrence at the GPHG prize-giving ceremony two weeks earlier, he shares: "As they called me up to the stage, my wife heard somebody ask, 'why is he going up now?'"

With a professional identity so intertwined with that of Chopard for over three decades, Karl-Friedrich Scheufele will no doubt come to be the face of Ferdinand Berthoud as well in time.

Jamie Nonis enjoys writing about luxury lifestyle, business and holistic wellness