

PATEK PHILIPPE

INTERNATIONAL MAGAZINE

VOLUME V NUMBER 1





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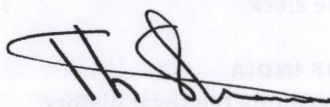
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A STORY ABOUT SKILL

"At Patek Philippe, it can take years to train our skilled specialists. It is one of the reasons we do not make more watches than we produce today.

We are not magicians. At our family-owned company, everything we do relies on the skills of our people. Very human skills which cannot be rushed or replaced.

Only humans can accept the challenge to always be at the edge of what is possible."



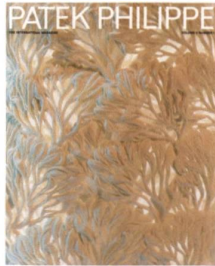
THIERRY STERN
PRESIDENT, PATEK PHILIPPE



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On the cover: this close-up image of Hitomi Hosono's *A Komorebi Tower* shows the organic, delicate intricacy of the ceramic artist's porcelain pieces, captured by Felicity McCabe's sympathetic photographic style. London-based Hosono creates her detailed botanical vessels after careful study of the natural world, modeling and carving every individual part by hand

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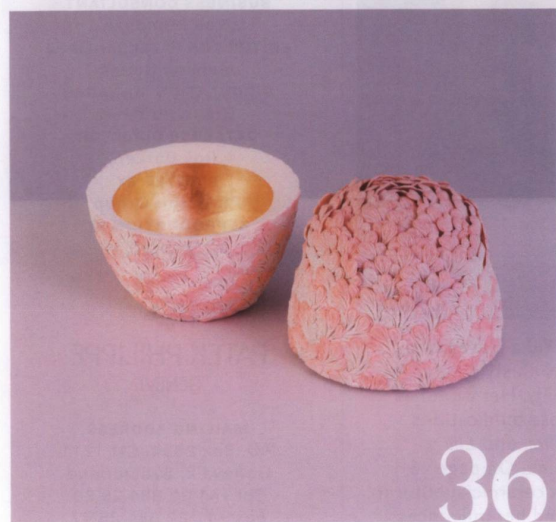
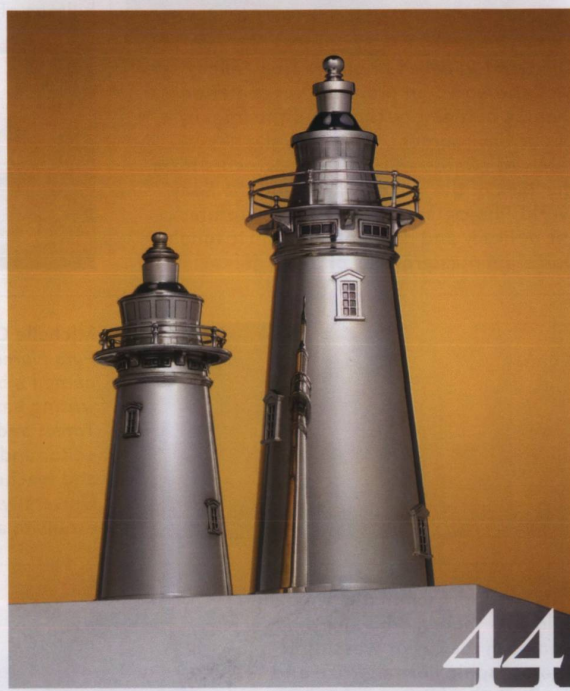
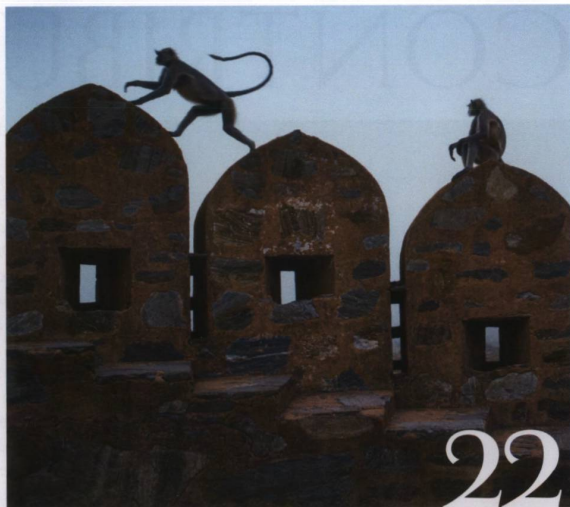
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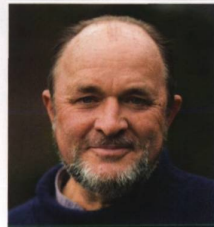


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The London-based photographer **Felicity McCabe** works on projects that center on themes of memory, time, and the fragility of our environment, for which she has received awards and acknowledgments from the likes of the Lucie Awards and the Sony World Photography Awards. She captures the delicacy and detail of Hitomi Hosono's porcelain masterpieces on page 36.

The award-winning author of the books *White Mughals*, *The Last Mughal*, and *Return of a King*, **William Dalrymple** is a regular contributor to the *New York Review of Books* and the *Guardian*, a broadcaster, and he cofounded the Jaipur Literature Festival. On page 22 he explores the story of Kumbhalgarh Fort, high in the verdant hilltops of Rajasthan.

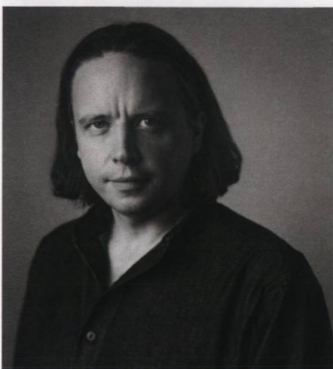


Known for his luxurious, bold images, **Aaron Tilley** applies his conceptual still life photography skills to rendering the beautiful forms and character of vintage cocktail shakers on page 44. He has worked with *British Vogue*, *Vanity Fair*, the *Gourmand* journal, and *Kinfolk Magazine* to create similarly captivating images, regularly collaborating with art directors, artists, and set designers on larger projects.



Michelle Orange is the author of two nonfiction books, *Pure Flame* and *This is Running for Your Life*. The latter was named a best book of the year by the *New Yorker*. Orange's writing has appeared in *Harper's Magazine*, the *New York Times*, and *Slate*, among others. She is a contributing editor and columnist at the *Virginia Quarterly Review* and teaches at Goucher College, Maryland, and Columbia University. On page 64, she considers the delicate and exquisite art of miniature bookbinding.

With an approach that is typically bold yet ethereal, **Phil Sharp** has won both the Taylor Wessing Photographic Portrait Prize and the Portrait of Britain award on numerous occasions, as well as worked with clients including Adidas and Universal Records. His atmospheric shots of Stephen Jones's bewitching millinery are showcased opposite, on page 5.



The editor in chief of the international horological magazine *Europa Star*, **Pierre Maillard** has taught at Geneva's École des Arts Décoratifs, independently produced feature films, and worked with Télévision Suisse Romande (RTS). He examines Patek Philippe's new REF. 5470P with its 31 patents on page 30.



The journalist and editor **Yuka Hasegawa** writes on subjects such as lifestyle, food and drink, and sustainability. Her work has appeared in luxury Japanese publications including *Precious*, *Signature*, and *Elle Gourmet*, in print and online. On page 36 Hasegawa asks the expert ceramicist Hitomi Hosono about her craft and her influences.

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STORY


Tim Blanks

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Phil Sharp

BRIMMING WITH IDEAS

The British designer Stephen Jones has been making expressive headpieces for more than four decades. His expertise in the centuries-old art of millinery shines through in his works, which are unique manifestations of his boundless creativity

A close-up portrait of a woman with dark hair, looking slightly to the left. She is wearing a striking, sculptural hat made of multiple layers of a golden-brown, textured fabric, possibly silk or a similar material. The hat is perched at an angle, with a large, curved, ribbon-like element extending from the side. The background is a solid, muted teal color. The lighting is soft, highlighting the texture of the hat and the woman's features.

“A HAT IS LIKE THE
EXCLAMATION
MARK ON A TEXT.
YOU RECOGNIZE
THE PUNCTUATION
BEFORE YOU SEE
THE WORDS”



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Previous page: this rococo-style headpiece, *Passion*, is made from tonal organza. During the design process, Jones used scraps of fabric and paper held together with pins to create the forms on which the final piece is based. Left: *Dancing at Ascot* is made from gold-plated crin, a material that is often used to give body to petticoats or shape to silk dresses, allowing the hat to maintain a form indicative of an imperial headdress

It's entirely fitting to say that Stephen Jones wears many hats. The maestro of modern millinery is simultaneously an artist, craftsman, amateur psychiatrist, philosopher, and even grammarian. "A hat is like the exclamation mark on a text," he declares. "What you recognize is the punctuation, before you see the words."

For more than 40 years, Jones has been a tireless ambassador for his métier, the art of millinery, or, as he phrases it rather more opaquely, "making hats what they're not." In his view, a hat is not simply a confection of fabric with a brim. "It's all about the message," he explains. One of his recent collections offers an enlightening example of how he engages with his art.

In 2018, after a visit to the National Museum of African American History and Culture in Washington, D.C., Jones created a collection called *Crowns* as a celebration of African American millinery. He learned that historically the only time workers had a day off was on a Sunday. Jones says, "They would go to church, and the women would dress up. They would wrap a piece of cloth around their heads." In *Crowns*, Jones honors this long tradition of hat-wearing, as well as African American music and faith, and the culture of Black beauty, inspired by figures such as Billie Holiday and Naomi Campbell.

The hat as a symbol of the strength of human spirit is irresistible. "It's the most visible accessory that you can wear," Jones agrees. "It's also the most disposable, the most frivolous, in a way, of anything you can put on your body. But even though it is frivolous, it becomes the most important, because you're putting it on your head."

Given the powerful prominence of a hat, it might seem strange that Jones rarely receives recognition for his hats when they are worn in public, unlike fashion designers and their dresses. "Always the bridesmaid, never the bride," he says with mock rue. But he really doesn't mind. He learned a long time ago that as a designer it is much more important to be a good listener than a prima donna. "As [the late] Diana Vreeland [the former fashion editor of *Harper's Bazaar* and editor in chief of *Vogue*] once said, 'Give 'em what they never knew they wanted,'" he says.

This is where Jones's amateur psychiatry comes into play. "It's the same for women

and men, everybody has a certain vision of what a hat can do for them. So I need to know about the client. I need to know where they hope to go to with this creation on their head. Because it comes into the room before you, a hat can do the talking for you. It's not really you, but it's part of the person you want to be or who people imagine you to be. Or it can really be you. You can be a romantic person and wear a romantic hat, though I find often that people want to be the opposite of who they are."

Opposites seem to be apposite in Jones's creative process. "You absolutely have to be a dreamer, but you have to be a realist, too," he explains. "A hat has to have the fantasy, and it has to have the function. Maybe the function is the fantasy. The purpose of a hat is to take the wearer away, but it still has to fit on their head and be balanced.

And so often when I make a hat for a client, they want to look pretty as well."

One of the milliner's many talents is being able to help people to express themselves. "It's about belonging. In the way the It bag gave the carrier an identity around fifteen years ago, now someone's identity can be expressed through a baseball cap or a bucket hat. The baseball cap is the classic, the T-shirt of hats." He adds, "I don't think a bucket hat is the easiest thing to wear, unless you have a swanlike neck and grace to match." I have to say, I do not, so I can be sure a bucket hat does not suit me.

"But that's not important for so many people," Jones counters. "It's really not about flattery, it's a cipher. It's a world away from when I draw a hat design. First of all, I draw a spine, because actually what you're doing is drawing the person, you're drawing their

character, and then you're putting a hat on them. A hat is not a product, like a handbag or a pair of sunglasses. It is somehow this very emotional evocation of hopes and dreams." Jones doesn't want to sound as though he's criticizing baseball caps and bucket hats, which are, more often than not, the way many citizens of the world dress their heads at the moment. And after all, Jones has elevated both these shapes of headwear for clients such as Dior.


We've so far managed to philosophize about hats without getting much into the design process, without discussing how hats take flight in Jones's imagination and find form in the real world. What's happening with his next collection, for instance?

Jones says he had been thinking about the softness and drape of Arabic styles of dress in contrast to the pattern-cut hard lines of European tradition. So he went to Morocco on a research trip. Then, after that, he found himself thinking about the legendary nightclub El Morocco, which was located in New York and popular with celebrities during the 1930s, '40s, and '50s. "I looked it up and I thought, 'Why?' and then I thought 'Why not?' And you look at things that connect with the country and the nightclub – there's Marlene Dietrich in the 1936 film *The Garden of Allah*, there's *Casablanca*. And *Blade Runner*, when Rick Deckard [played by Harrison Ford] goes into a bar, and it's supposed to be in the future but all the patrons are wearing cocktail hats and it looks like the interior of El Morocco. So that's where my mind has been meandering," Jones explains.

The theme of this new collection that Jones is working on reflects the exuberance of post-pandemic fashion. As he sees it, "People want something strong and mad and crazy now, something that reflects celebration." That desire has translated, in part, into a reinvigorated appetite for headpieces. The collections that Jones designs for Dior garnered remarkable sales in 2021.

"Fashion is all smoke and mirrors," he muses. "And a hat is perhaps the best form of smoke that you can wear." Apparently, when outlining Stephen Jones's many roles, I should have mentioned "magician." The milliner has got quite the list of accomplishments and quite the collection of hats to wear to complement them. ♦





"I compose concept boards of different themes divided by silhouette, texture, fabric, inspiration, or just millinery frivolities," Jones explains. In Vain (right), layered coque feathers give a draped shape, imitating the cockerel found on a weathervane in a playful

headpiece inspired by the characteristic British obsession with the weather. The passage of time is reflected in Witching Hour (opposite), which, on a jacquard silk base, features a feather quill for the clock hands paired with beaded embroidery for the numbers



CULT CLASSIC

REF. 5098

The distinctively shaped REF. 5098P is intriguing not only for its design but also because it takes us back to the early twentieth century and the furor of Patek Philippe's first foray into the South American market. Nicholas Foulkes tells the story

"The history of design is studded with cultural paradigm changes and eclectic schools of thought," explained a 1993 Patek Philippe catalog that welcomed a new collection of unusually shaped timepieces described as "a contemporary interpretation of the Art Deco style." While the watches, not to mention the paradigm changes and eclecticism, were all new, their name – Gondolo – would have been familiar to students of Patek Philippe's long and eventful history.

A celebrated jeweler and watch retailer in Rio de Janeiro, Gondolo & Labouriau, sold thousands of Patek Philippe watches during the late nineteenth and early twentieth centuries. This huge demand was driven by an innovative sales system (part installment-payment plan, part lottery) that saw the name Patek Philippe become a Brazilian metonym for any kind of watch.

Today, we would say that Patek Philippe went viral. There was a Patek Philippe waltz; there were Patek Philippe clubs; there was even branded merchandise (a 1915 photograph of a Patek Philippe club picnic shows a group of men wearing vast sombreros emblazoned with the watchmaker's name). At one time, supplying Gondolo & Labouriau, later renamed Relojoaria Gondolo, accounted for almost a third of Patek Philippe's annual production.

Gondolo & Labouriau made the name of Patek Philippe famous in South America, but in the wake of the Wall Street Crash of 1929, the weight of the retailer's unsettled debts very nearly destroyed the company. Its complete collapse was only averted by the Stern family's rescue bid.

The sombreros, the waltz, and the complicated lottery scheme have a habit of obscuring the horological significance of the relationship between Patek Philippe and the Brazilian company. Gondolo & Labouriau specified a number of defining technical characteristics for the watches they sold, including a wheel-train of 9k gold, an S-shaped center-wheel bridge, and a "mustache" escapement, easily identified by a comma-shaped cam perfected by Jean Adrien Philippe in 1881. Obviously, at first the timepieces were pocket watches, but as the years passed, similar refinements were to be found in wristwatches, which began to be shipped in increasing numbers following the turn of the twentieth century.

When these wristwatches had first appeared, they embodied modernity and were set apart from the pocket watches because they eschewed the circular case in favor of something more geometrically interesting, with larger shaped cases being further adapted to better fit the curvature of the wrist. Square, rectangular, cushion-, and tonneau-shaped cases were the favorites back then. In 2007, Patek Philippe decided to launch a new watch that paid tribute to one of the most celebrated early twentieth-century tonneau watches in form and name, the Chronometro Gondolo. It had been 80 years since the last Chronometro Gondolo had been made in 1927, and now the name was back in

production as the REF. 5098P, the "P" denoting that platinum had been selected for the metal type (also indicated by the diamond set in the caseband at six o'clock, as on all Patek Philippe platinum watches), presumably to highlight the significance of the new model.

Even though eight decades separated the two watches, the REF. 5098P's resemblance to the 1920s original was, in many ways, uncanny. The barrel-shaped profile that gave the older watch its character had been revived, as had the intricately finished rhodium-plated gold dial. Just as important as the case shape, the finish of the REF. 5098P's cambered dial was almost identical to that of its storied ancestor. The bold Arabic numerals, executed in a fine, historically accurate cursive script, were arranged within an oval *chemin de fer* minute track. As with the original, the minute scale divided the dial into two separate areas of hand-guilloché engraving, with cartouches at twelve and six o'clock displaying "PATEK PHILIPPE GENEVE" and "CHRONOMETRO GONDOLO" respectively. The only discernible departure from the original dial was the words "SWISS MADE" in a small cartouche below the number six.

But at the same time as adopting the elegant lines of the past, this watch was an entirely modern Patek Philippe, as became apparent when it was turned over. The display caseback, like the sapphire crystal covering the dial, was contoured to mirror the curvature of the case. Through the crystal it was possible to see a brand-new Patek Philippe caliber first launched with this watch.

Despite being new, though, the manually wound 4 Hz movement was as much of a historic statement as the tonneau case. The distinction of the caliber 25-21 REC is to be found in the suffix: "REC" denotes a rectangular shape. The caliber was heralded at the

time as "the manufacture's first simple 'form movement' since its famous 1930s and 1940s predecessors." Moreover, the architecture of this modern wristwatch movement echoed some of the design signatures of the original Gondolo & Labouriau calibers. Sadly, the mustache escapement was not revived, but the elegant, S-shaped center-wheel bridge was easily recognizable, and the slender escape-wheel and fourth-wheel bridges allowed a relatively unimpeded view of the caliber.

Given the historical resonance of the case design and the new, shaped movement making its debut behind the guilloché dial, this was a watch that, for the connoisseur, was rich in historical significance. But its cultural importance aside, it could be appreciated simply as a finely wrought item of sublime beauty. The press release announcing the launch of the REF. 5098P contained the sentence, "The tonneau is one of the classic case shapes in watchmaking, and it has never been as consummately refined as for the REF. 5098" – a bold claim. Yet 15 years later, with the model, alas, discontinued, those fortunate few who have this exquisite timepiece in their collection will find it hard to disagree. ♦

IT HAD BEEN 80 YEARS SINCE THE LAST CHRONOMETRO GONDOLO HAD BEEN MADE



Opposite: the Chronometro Gondolo REF. 5098P of 2007. Above: a tonneau-shaped, 49.1 mm x 30.1 mm, yellow gold model that was delivered to Gondolo & Labouriau in 1921 and is now in the Patek Philippe Museum, Inv. No. P-1322 (Movement No. 180 780)

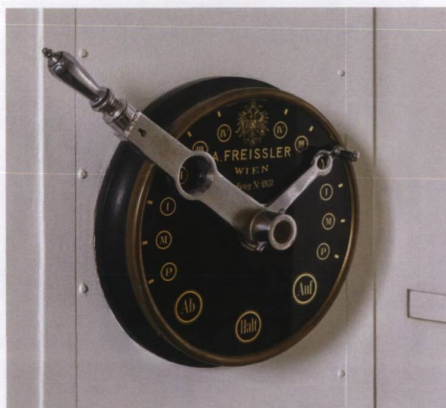


ELEVATED STYLE

It could be seen as a happy accident of history that the development of elevators for multistory buildings coincided with an artistic movement that was perfectly suited to stylizing the necessary cages. Inside some exemplars of art nouveau architecture, one may find ironwork elevator cages that gave design full rein

In December 1895, Siegfried Bing, a German dealer in the arts and crafts of Japan, opened a gallery at 22 rue de Provence in Paris. Called the *Maison de l'Art Nouveau*, or the House of Modern Art, it went on to give its name to a highly influential fashion in the decorative arts: art nouveau. Characterized by sinuous, organic lines, art nouveau was inspired by artistic styles including Japanese prints and the British Arts and Crafts movement, which was born as a reaction against repetitively designed, mass-market products of the Industrial Revolution. Like Arts and Crafts, art nouveau celebrated the handmade over the machine-made and the one-off over the widely available.

Though its popularity was brief, peaking between 1890 and 1910, art nouveau quickly spread across Europe, where it became known under various alternative names, such as *Jugendstil* in Austria and Germany, *Stile Liberty* in Italy, and *Modernisme* in Spain. Art nouveau influenced every aspect of the arts from illustration to jewelry, but perhaps the most striking expressions of the style were architectural. This was the age of the *Gesamtkunstwerk*, generally translated as the “total work of art,” which held particular appeal for architects, especially those who wanted to control every aspect of their work, not just the disposition of doors



The *Majolikahaus*, or Majolica House, in Vienna was unveiled in 1898 and described by a local newspaper as “one of new Vienna’s most beautiful buildings.” The apartment block’s facade is decorated in floral designs of sculpture and wrought iron as well as the eponymous glazed tiles. Echoing the Secession

design of the exterior, the ornate wrought-iron elevator cage and stair rail inside (opposite) have a light color scheme and floral elements. The floor-selector crank (above) bears the name of the engineer, Anton Freissler, who had exhibited his electric-powered elevator prototype at the Vienna Trade Fair in 1883

and windows but minor details such as lights, metalwork, latches, and doorknobs.

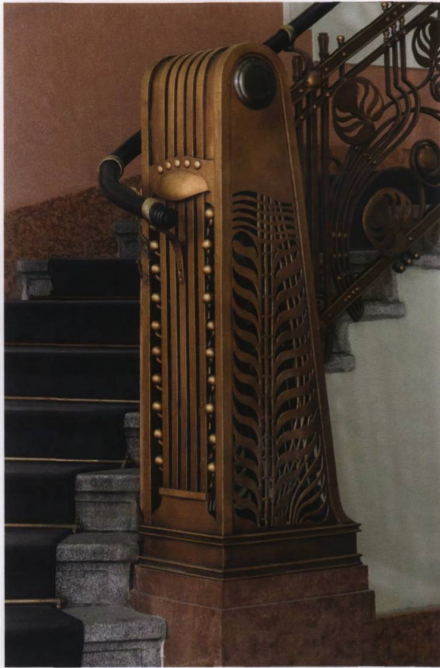
Just by serendipity, the flowering of art nouveau in Europe coincided with the embracing of another innovation, though technical rather than aesthetic. This was the passenger elevator, which transformed how people lived on both sides of the

Atlantic. Although we usually think of it as a fairly recent invention, the elevator had been around in one form or another since at least the days of the Roman Empire: the Colosseum had around 25 elevators for hoisting animals up to the arena from below through trapdoors, manually operated by up to eight men per hoist. But these were slow, cumbersome, and dangerous examples, mostly used for goods instead of people.

While the USA is generally regarded as the birthplace of the passenger elevator, in fact the first example that we would recognize as such was installed in another Colosseum – this one in the UK. Completed in 1827, the London Colosseum stood in Regent’s Park and, despite its name, was actually modeled on the Pantheon in Rome. Its vast interior contained a 46,000-square-foot painted panorama of London with a high central viewing platform reached by spiral staircases, which were supplemented by what its inventors called an “ascending room.” Decorated in an Elizabethan style and with space for 12 people, this elevator was lit by stained-glass roof lights and winched up and down by a concealed steam engine.

It wasn’t until the 1860s, however, that elevators began to be a standard feature of smart hotels and department stores. But these steam-driven early models were noisy





Opposite and above: the Hotel Central in Prague was built by Alois Dryák and Bedrich Bendelmayer in 1900 and is one of the oldest examples of art nouveau in the city, as are its elevator cage and staircase. Called *secesní* in Czech, this version of the decorative style ranges from the floral exuberance of Parisian art nouveau to the more restrained version of the Viennese Secession.

The stair railing is stylized and linear but includes leaf forms. Right: in Paris, the La Semeuse building, constructed between 1910 and 1912, has retained its original elevator cage and the stairwell's stained-glass windows (seen behind) by the decorative artist Francis Jourdain (who was the son of the building's architect, Frantz Jourdain). The black wrought-iron elevator cage includes gilded flowers



and grindingly slow, and it took another decade before they really started to take off as New York and Chicago began their astonishing transformations from low-rise to high-rise cities.

The first building to be designed with integral elevators on the architect's drawings was the eight-story Equitable Life Building in Manhattan, which was completed in 1870. Other offices and apartment blocks with built-in elevators quickly followed. In 1880, the German engineer Werner von Siemens unveiled the first electric elevator, which was more compact, far faster, and quieter than earlier models, and these new elevators soon became the norm.

Despite von Siemens' innovation, Europe lagged behind the USA in its embrace of elevators, which remained rarities until well into the 1880s. This seems to have been partly to do with innate conservatism and fear of the new but, ironically, perhaps the

main reason it took longer for elevators to be adopted was because Europeans were already accustomed to living in multistory buildings. Citizens of Paris, Vienna, Madrid, and Milan had been occupying apartment blocks since the early nineteenth century, so walking up 10 flights of stairs was something that many people were used to.

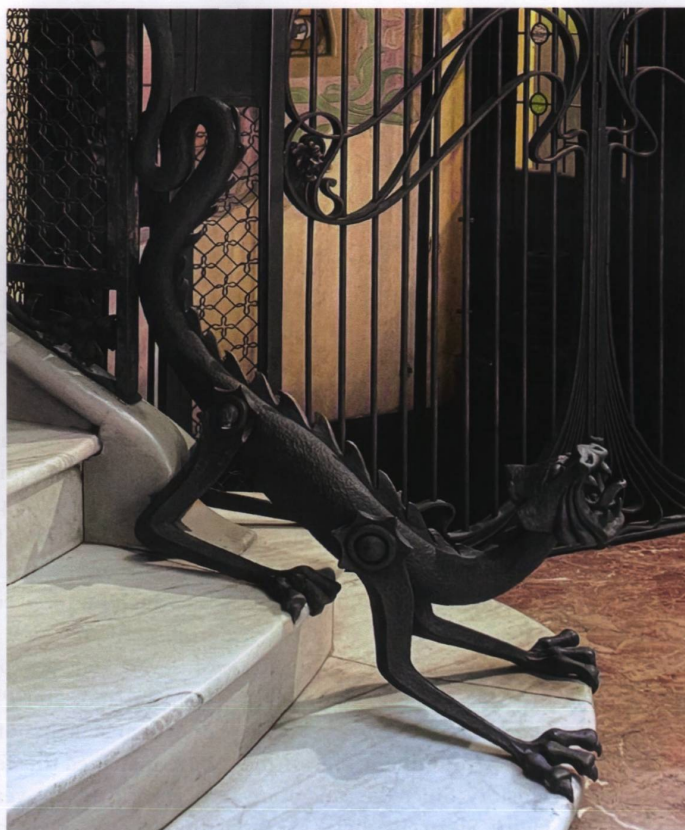
Andreas Bernard, the author of *Lifted: A Cultural History of the Elevator*, also points out that in the USA, the development of multistory dwellings in New York or Boston and that of the passenger elevator happened simultaneously, so the first elevators in America were built into the core of the

house itself. In Europe, by contrast, the first passenger elevators had to be built inside already existing stairways. That's the reason for the cage-like open elevators in cities such as Paris, Vienna, or Madrid – a type that is almost unknown in the USA.

In 1890, *Scientific American* magazine identified a new medical condition they called "elevator sickness," a kind of elevator-induced nausea. This was caused, no doubt, partly by passengers being unaccustomed to traveling in a vertical direction, but the movement of early models was also anything but smooth, and their deceleration could be alarmingly sudden. In an attempt

The *Musenhau*s, or House of the Muse, in Vienna, also known as the Medallion House after the decorations on its facade, was built in 1898 by Otto Wagner alongside the Majolica House (see pages 12–13). The building's spiraling stairwell has railings and an elevator cage embellished with leaves





EARLY ELEVATORS WERE DECORATED LIKE LIVING ROOMS, WITH SOFAS, SOFT FURNISHINGS, AND EVEN CHANDELIERS

to calm people's nerves, these early elevators were decorated as far as possible to look like living rooms, with sofas, soft furnishings, and even chandeliers, and each one had its own dedicated operator who was responsible for making sure it stopped in the correct position on each floor.

When it came to apartment blocks, most European architects and developers of the time rejected elevators altogether. But a select few saw them as an opportunity to explore new forms of expression, and they created some of the most striking elevators the world has ever seen.

In Vienna, the architect Otto Wagner, one of the most brilliant exponents of art nouveau, designed three apartment blocks on Linke Wienzeile, a new boulevard built over the river Wien. Two of these, which became known as the Majolica House and the Medallion House after the decorations on their facades, boasted elevators (made by Anton Freissler) – the height of luxury when

they were completed in 1898 and 1899. Like the majority of European elevators of their time, they rose up through the open stairwell in the center of the building, and for safety they were enclosed by metal cages. Made from wrought iron, these cages are masterpieces of the metalworker's art, integrating a novel technology into a traditional form.

Fine art nouveau elevators also survive in Paris and Prague among other cities, but perhaps the most extraordinary examples of all are to be found in Barcelona, where

Above: Josep Masdéu i Puigdemasa's Casa Antoni Segarra in Barcelona was built between 1904 and 1907 and is ornamented inside and out with sinuous moldings, floral reliefs, and stained glass. In the hallway, which is lit by hanging lanterns made of wrought iron and colored glass, the elevator cage gates, through which floral

stained glass can be seen on the elevator doors, follow the overall decorative scheme, with long lines ending in leaves and flowers. A surprise guards the gates: roaring from the bottom of the marble stairs is a wrought-iron dragon. Passengers must bravely reach over the fierce-looking creature to request the elevator

art nouveau attained a kind of delirious apotheosis in the work of Antoni Gaudí and his followers. Gaudí himself is thought to have commissioned the elevator in his world-famous Casa Batlló, though sadly that was later removed. Luckily, one or two others are still in situ in Barcelona, including a remarkable model from 1904 (see above), designed by the Catalan architect Josep Masdéu i Puigdemasa for the Casa Antoni Segarra in the city's Eixample district.

Like a strange but wonderful firework display, art nouveau flared up, exploded in a glitter of colorful stars, and then faded away almost as quickly, finally extinguished by the First World War. As elevators became more widespread, they quickly lost their early glamour and novelty to be supplanted by the functional boxes we now take for granted. But at least we can look back on a time when they were considered worthy of attention by the greatest designers, as well as engineers, of their day. ♦



RARE HANDCRAFT TREASURES

Rare handcraft pieces always hold a special place in the heart of the Patek Philippe collection. Here, Thierry Stern explains how one particular enameled dome table clock honors and celebrates two of his father's greatest passions

Unveiled in spring 2022, our new Rare Handcrafts collection features several pieces with links to Geneva, our manufacture's birthplace. Among the creations, one is particularly dear to me: the dome table clock REF. 20118M in cloisonné and *paillonné* enamel, christened "Bol d'Or" (or Golden Globe) after the most prestigious regatta that is held on Lake Geneva, the world's largest inland lake regatta.

The lake plays a prominent role in the Stern family's history. Since the time of my grandfather, Henri Stern, we have always lived close to its shores and have practiced a range of aquatic activities there. The Bol d'Or is also an important element of our family heritage. Between 1977 and 1992, my father, Philippe Stern, a dedicated sailor and seasoned navigator, won this race seven times (in 1977, 1980, 1982, 1984, 1985, 1986, and 1992), with different boats,

each named *Altair* after his lucky star, the brightest in the Aquila constellation.

Indeed, in 1984 my father was the definitive winner of the Bol d'Or Challenge having scored three victories in five years, for which he received a silver replica of the trophy. At the time of writing, the record of seven victories per sailor has still not been broken, and Philippe Stern remains one of just a handful of sportspeople to have managed this feat.

During his 15 years of participation in this legendary event, my father worked closely with Philippe Durr, a shipbuilder, skipper, and many-time champion of the sailing world in various categories. He, too, won the Bol d'Or seven times and has happy memories of this epic experience. "What an adventure! And as a boatbuilder I consider myself very spoiled. I built five boats for Philippe Stern, including the *Altairs IX, X, XI, and XII*, and shared in his victories on Lake Geneva," Durr reminisces.

For my father, the Bol d'Or was essentially both sporting and human, and it was a great technical challenge to which he brought all his visionary thinking, working closely with Philippe Durr and the naval architect Bernard Dunand. My father was always on the lookout for innovations that could improve his boat's performance, as Philippe Durr recalls, "When I suggested building a multihull for the lake and the Bol d'Or in the mid-1970s, he did not

hesitate for a second. And he set about having this type of craft accepted in the regatta despite those who said, 'It's not a boat.' In 1980, the trimaran *Altair IX* became the first multihull to attain the Bol d'Or. We know how important a part of the race multihulls are now."

And my father was not about to stop there. "He was constantly searching for new ideas, urging us to go further," says Durr. "No sooner was a race won than he would be onto a new project for his boat to be lighter, faster, more powerful. We were always ahead.

"In 1984, the catamaran *Altair XI* was equipped with the world's first carbon fiber mast. Next, we set our sights on winning the Bol d'Or without sails. We developed a sort of vertical wing in three panels. Techniques at the time prevented us from realizing the project, but again it was a visionary idea. We even came up with the concept of a boat that did not touch the water, drawn by kites flying at an altitude of nearly ten thousand feet. People thought that we were mad. But today, even monohulls fly!"

Thus, while continuously optimizing his own boats, my father strove to advance the field of sailing in general. I saw that same spirit in his leadership of Patek Philippe, and it still guides all my own actions: innovating constantly to improve the accuracy of our watches while also advancing the great art of watchmaking.

My father's participation in the Bol d'Or adventure terminated with his 1992 victory. During this period the plans to group all our workshops into one large manufacturing site at Plan-les-Ouates were taking shape, and he had announced that he would withdraw from the competition when he received the building permit. Philippe Durr remembers my father's words when the day came. "We have competed in the Bol d'Or for fifteen years; we have won seven times. We are not dissatisfied with our results; we can stop now." And so my father turned his attention to another flagship, the great Patek Philippe



FOR MY FATHER, THE BOL D'OR WAS
A GREAT TECHNICAL CHALLENGE
TO WHICH HE BROUGHT ALL HIS
VISIONARY THINKING



This page and opposite: three views of the "Bol d'Or" REF. 20118M dome table clock. The dial has an hour circle of ebony and is set with 12 gilt, applied hour markers that are in the shape of lakeside mooring posts. On top of the dome lies the enameled shape of Lake Geneva with the course of the Bol d'Or race charted in yellow gold wire

This page (right): a side detail of REF. 2011&M shows some of Mr. Stern's winning racing boats depicted in cloisonné enamel. Their victory dates are inscribed above them in miniature painting on enamel. The enamel work required eight to 10 firings, using cloisonné (the technique in which the artisan fills the *cloisons*, delineated by thin gold wire, with enamel paste) and *paillonné* (whereby small gold- or silver-leaf *paillons*, or punched spangles, are covered with translucent enamels)

building at Plan-les-Ouates on the southern side of Geneva, inaugurated in 1996.

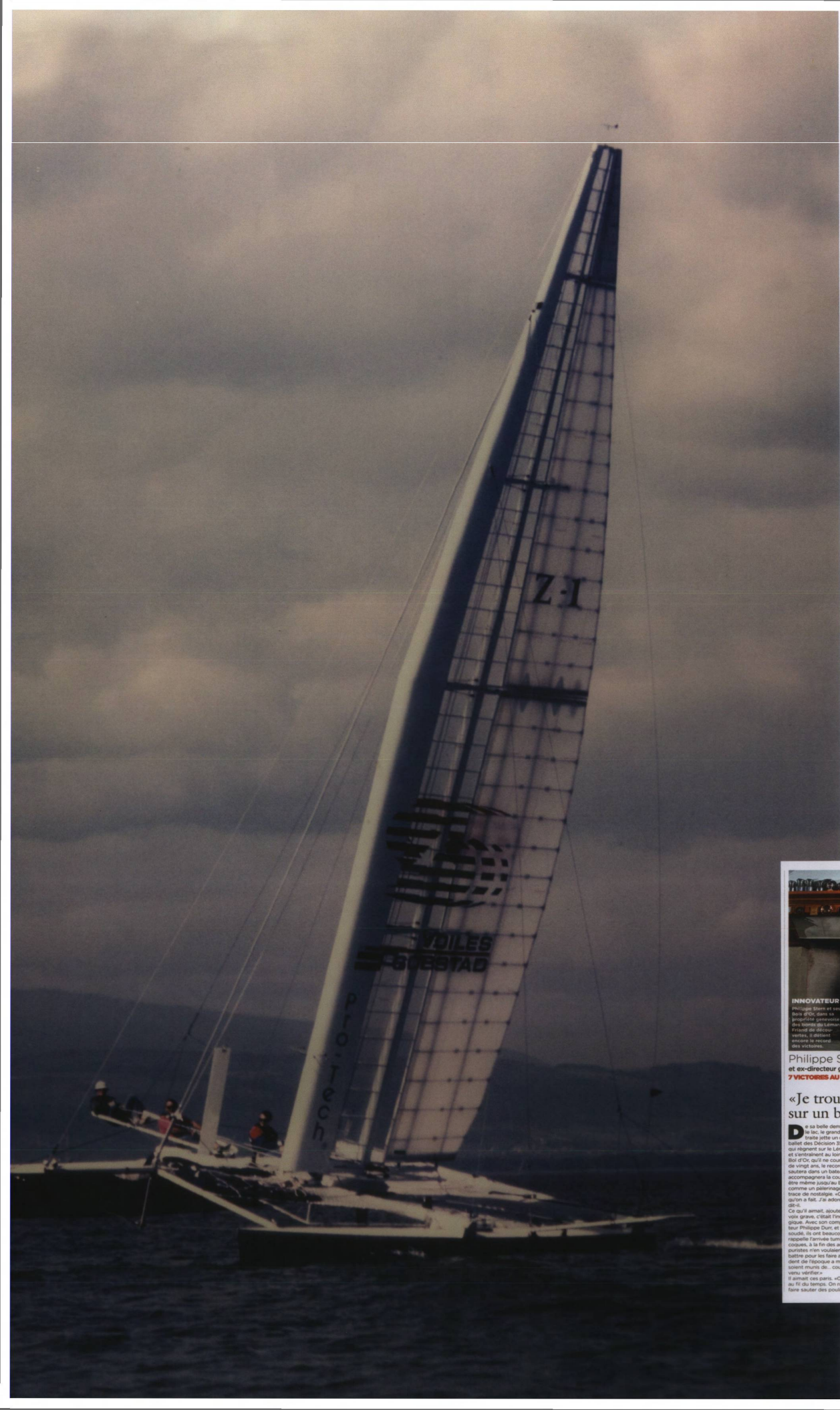
The "Bol d'Or" dome table clock honors my father's achievements in what is the foremost of our lake's regattas. This piece depicts the various *Altaïr* boats in which he won (a Toucan, trimarans, and catamarans), along with the dates of his seven victories, which are inscribed in miniature painting on enamel, and a map of Lake Geneva that charts the course of the race in gold wire.

But this unique clock is also a superb example of rare handcraftsmanship, another form of excellence that we practice every day at Patek Philippe. The *grand feu* cloisonné enamel decoration called for some 46 feet of yellow gold wire and translucent, opaque, semi-opaque, and opalescent enamels in 64 colors and blends. Gold leaf and tiny gold star-shaped spangles called *paillons* are embedded in the enamel to illuminate the whole. A handcrafted cable motif resembling a ship's ropes adorns the borders of the hour circle and the clock frame.

The piece is a fine tribute to outstanding feats of sportsmanship, and it also celebrates another of my father's passions – the rare and precious handcrafts inherited from the great watchmaking tradition, which he has long worked to preserve and let flourish. ♦

Translated by Barbara Caffin





Mr. Stern's passion for the lake and its sporting events was the subject of an article in the Swiss weekly *L'illustré* from 2013 (below). Pictured with some of his many trophies, Mr. Stern said that "the pleasure lies not in having beaten my opponents but rather in having mastered all the elements that make up the lake's personality," as he is seen doing on Lake Geneva (left), leaning out on the windward side, wearing a white hat. *Altair X* (see page 20, bottom), a boat built by Philippe Durr, carried Mr. Stern to victory in the Bol d'Or of 1982, as commemorated on the front of the dome clock (see page 19)

INNOVATEUR
Philippe Stern et ses deux d'Or, deux sa propriété genevoise. Ses boîtes ont même l'air de décorer le dôme victorieux le record des vitesses.

Philippe Stern 74 ans, Genève, président honoraire et ex-directeur général Patek Philippe
7 VICTOIRES AU BOL D'OR 1977, 1980, 1982, 1984, 1985, 1986, 1992

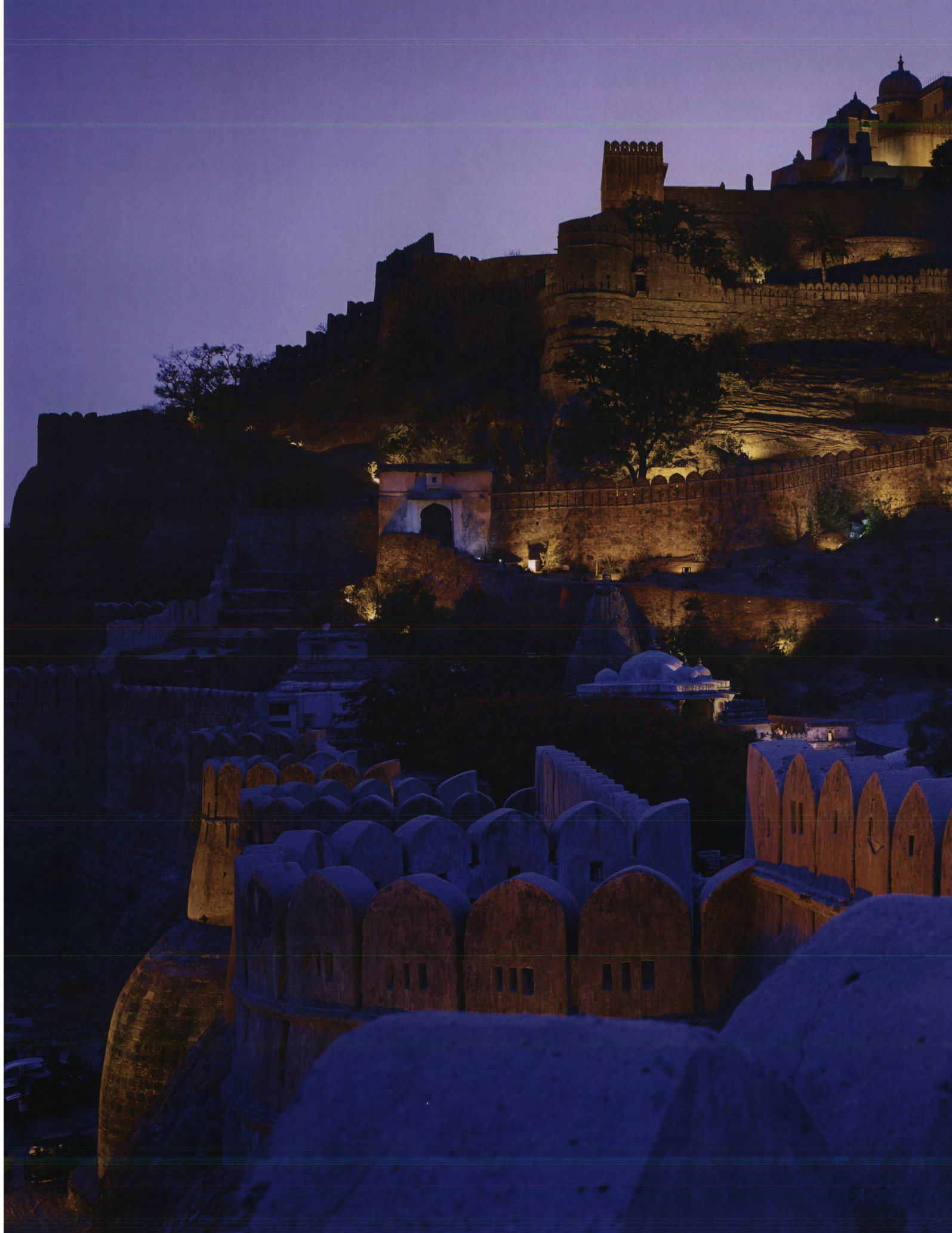
«Je trouvais noble de naviguer sur un bateau avec un nom»

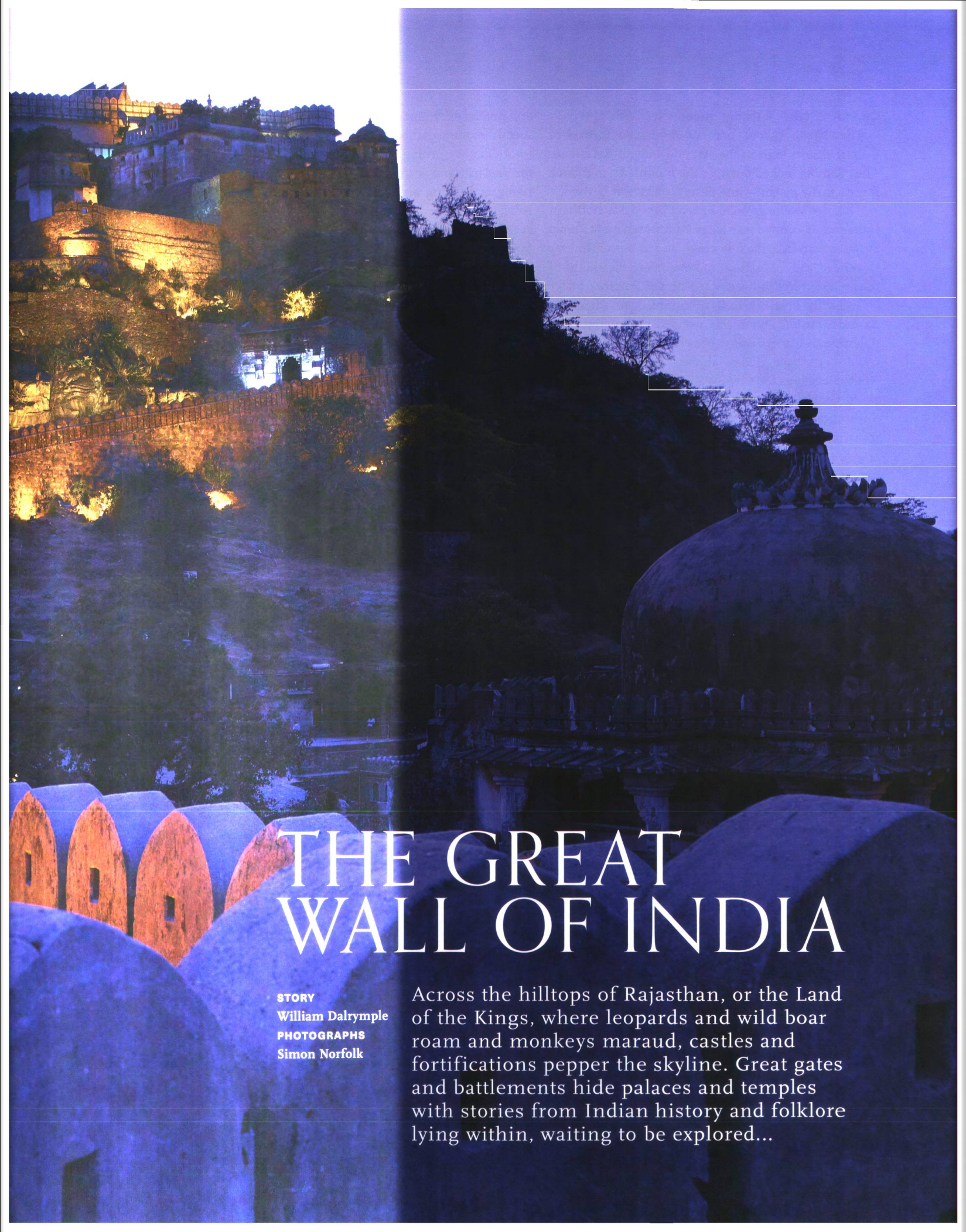
Déjà sa belle demeure dominant sur le lac, le grand horloge à la re-traité jette un oeil sur le ciel des Diction 35, ces catalanes qui règnent sur le Léman depuis dix ans et s'entraînent au Ion. Lors du prochain Bol d'Or, qu'il ne court plus depuis près de vingt ans, le recordman des victoires sautera dans un bateau à moteur et accompagnera la course sur l'eau, peut-être même jusqu'au Bouveret. «C'est comme un palémarque, lâche-t-il sans trace de nostalgie. «On a bien fait ce qu'on a fait. J'ai adoré cette époque».

Ce qu'il aime, ajoute-t-il de sa belle voix grave, c'est l'innovation technologique. Avec son compère le constructeur Philippe Durr et un outillage soudé, ils ont beaucoup essayé. Il se rappelle l'année tumultueuse des multicoques, à la fin des années 70. «Les puristes n'en voulaient pas. J'ai dû me battre pour les faire accepter. Le président de l'époque a même exigé des notions mûris de... cochettes. Et il est venu vérifier».

Il amuse ses pairs. «On a pas mal cassé, au fil du temps. On n'arrivait pas de faire sauter des boules. On a aussi expérimenté les premiers genouilliers (voiles avant) commandés aux USA. Personne ne savait ce que c'était. Nos voiles étaient latérales. Trop lourdes. Tout était en bois, ça craquait. Les bras étaient en fil. Le carbone passait au point. Plus tard, on a même essayé un matériau, placé des jubes en plastique derrière. Ces recherches m'ont passionnés. Tous les bateaux étaient très différents les uns des autres». Avec deux résultats probants: ses divers Altair ont gagné sept fois. «Tout était sur le Bol d'Or, pour le remporter».

C'est étonnant, il se rappelle sa première victoire, en 1977. «Nous sommes passés à travers un terrible orage. On s'est retrouvés seuls alors que la flottille était partie vers Vevey. Plus on a tenu, avec tout le monde derrière nous». En 1993, la nuit se rapproche de chance: «Nous nous sommes envolés de 20 mètres. Telle a été l'exploit. Nous l'avons plus jamais revu. C'était aussi extraordinaire. L'exploit même de Patek Philippe (2000 employés), il n'a jamais voulu attacher de la patte sur ses voiles. «C'était pas ma conception. Je trouvais noble de voguer sur un bateau avec un nom». **H. D.**





THE GREAT WALL OF INDIA

STORY
William Dalrymple
PHOTOGRAPHS
Simon Norfolk

Across the hilltops of Rajasthan, or the Land of the Kings, where leopards and wild boar roam and monkeys maraud, castles and fortifications pepper the skyline. Great gates and battlements hide palaces and temples with stories from Indian history and folklore lying within, waiting to be explored...

On May 5, 1540, a Rajput queen gave birth to a baby boy in a small, vaulted chamber in the great fortress of Kumbhalgarh, high in the Aravalli hills of Rajasthan. The chamber looked out over the mountains and thick forests to the distant white deserts of Mewar beyond.

The baby would go on to be remembered as northern India's most vaunted resistance leader, Maharana Pratap Singh. Meanwhile, the fort where he was born is forever associated with his refusal to bow before the might of the greatest force of his day, the Mogul Empire.

Today, the immense walls of Kumbhalgarh extend for 22 miles around the thickly wooded mountaintops of Rajasthan and are so wide in places that eight horsemen could once have ridden abreast along the parapet. Known locally as the Great Wall of India, this UNESCO world heritage site lies in a rich, verdant landscape, an unspoiled idyll. Being as remote as it is, Kumbhalgarh remains little visited and retains, completely intact, its craggy aura of defiance as the final bastion of Rajput resistance to the invading Moguls.

As you drive up from the plains into the hills, the deserts quickly give way to thick forests and steep ravines. For most of the year it's very hot across Mewar, and shimmering heat waves obscure the desert plains. But even in high summer the forest around the fort is rich and green, reminiscent of the bucolic hills in Mewar miniature paintings in which rajas hunt the wild boar that, to this day, rootle around here.

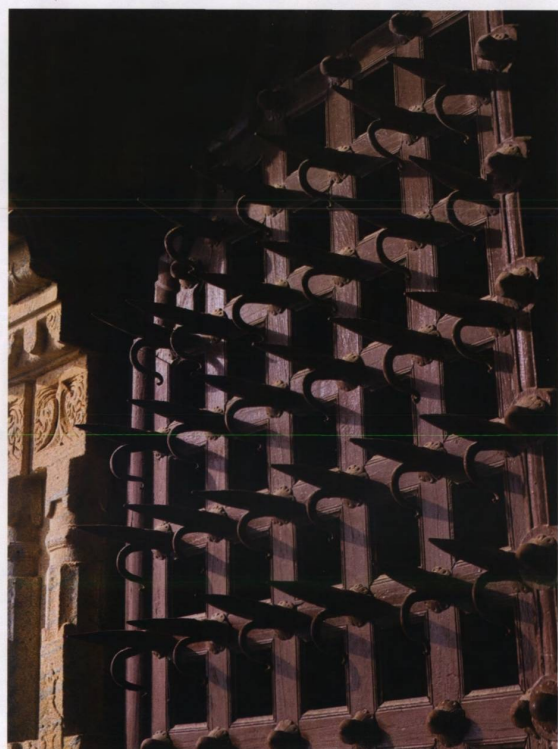
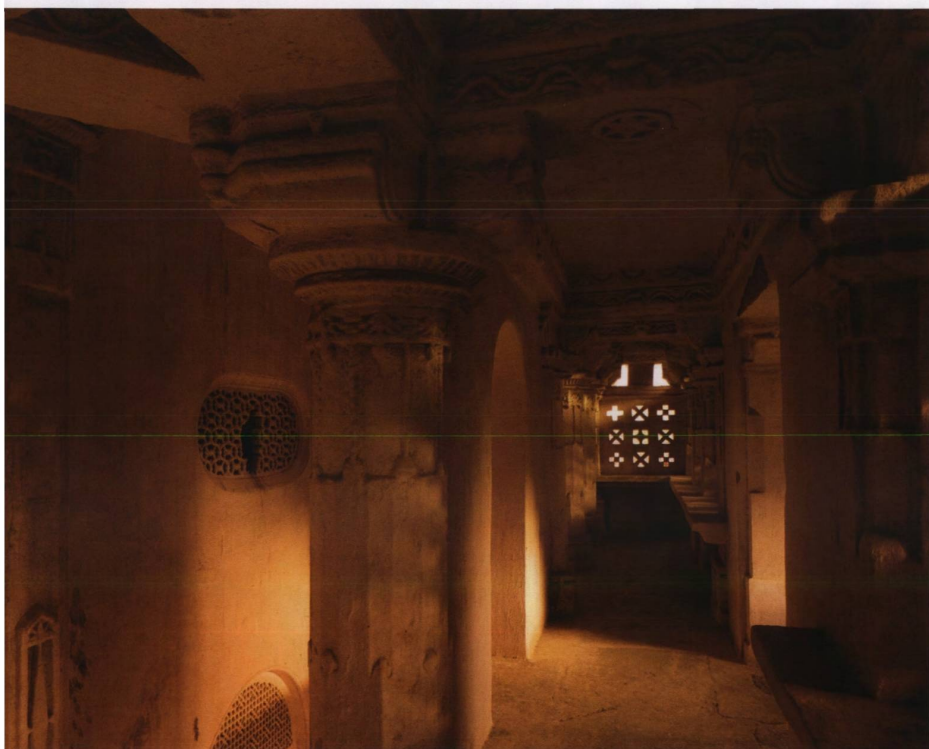
As you head farther into the Aravallis, the villages become more rural and more traditional; the farmers still wear white homespun cotton and yellow turbans;

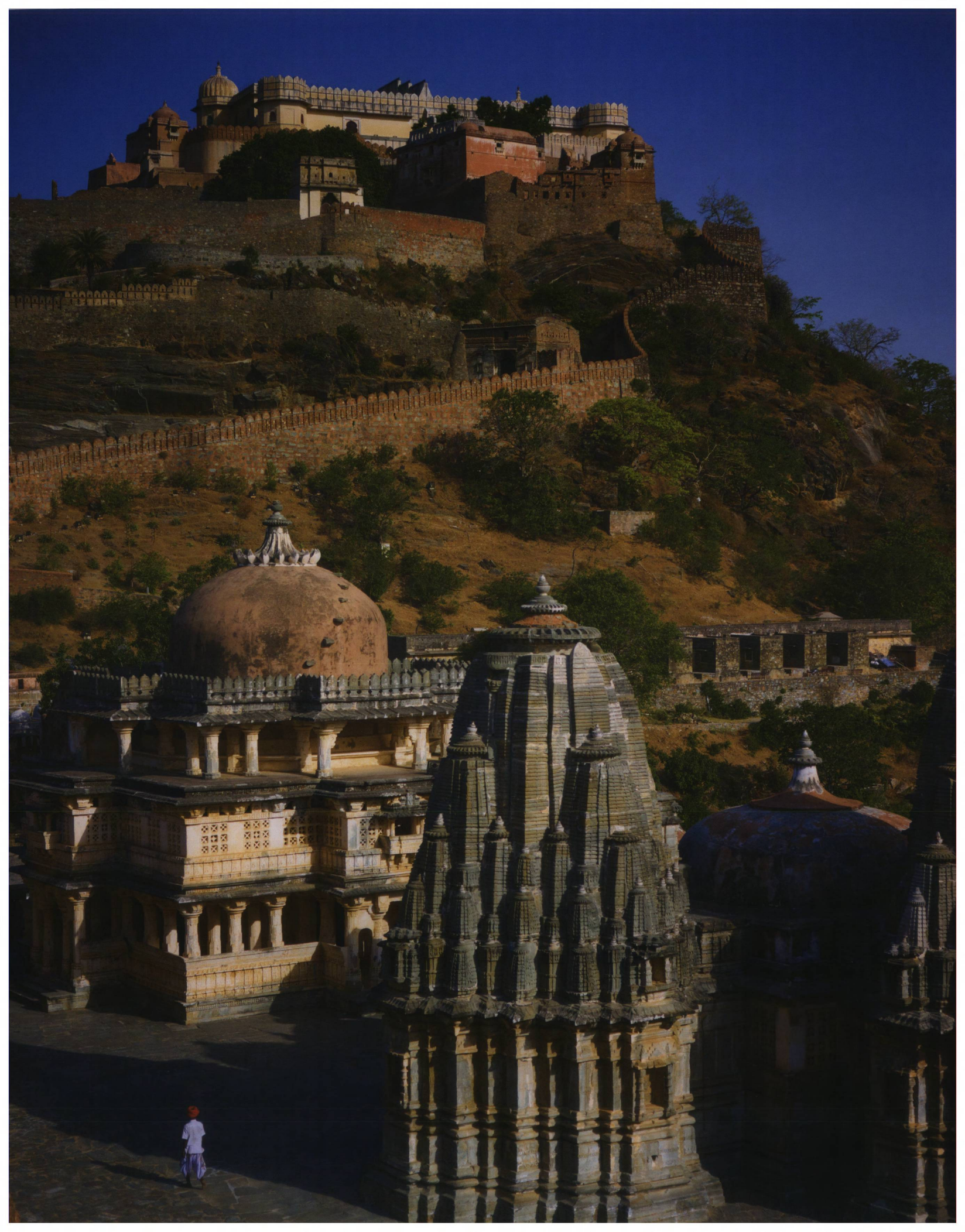
and nomad encampments full of grazing camels can be seen from the switchbacks of the roads as you climb.

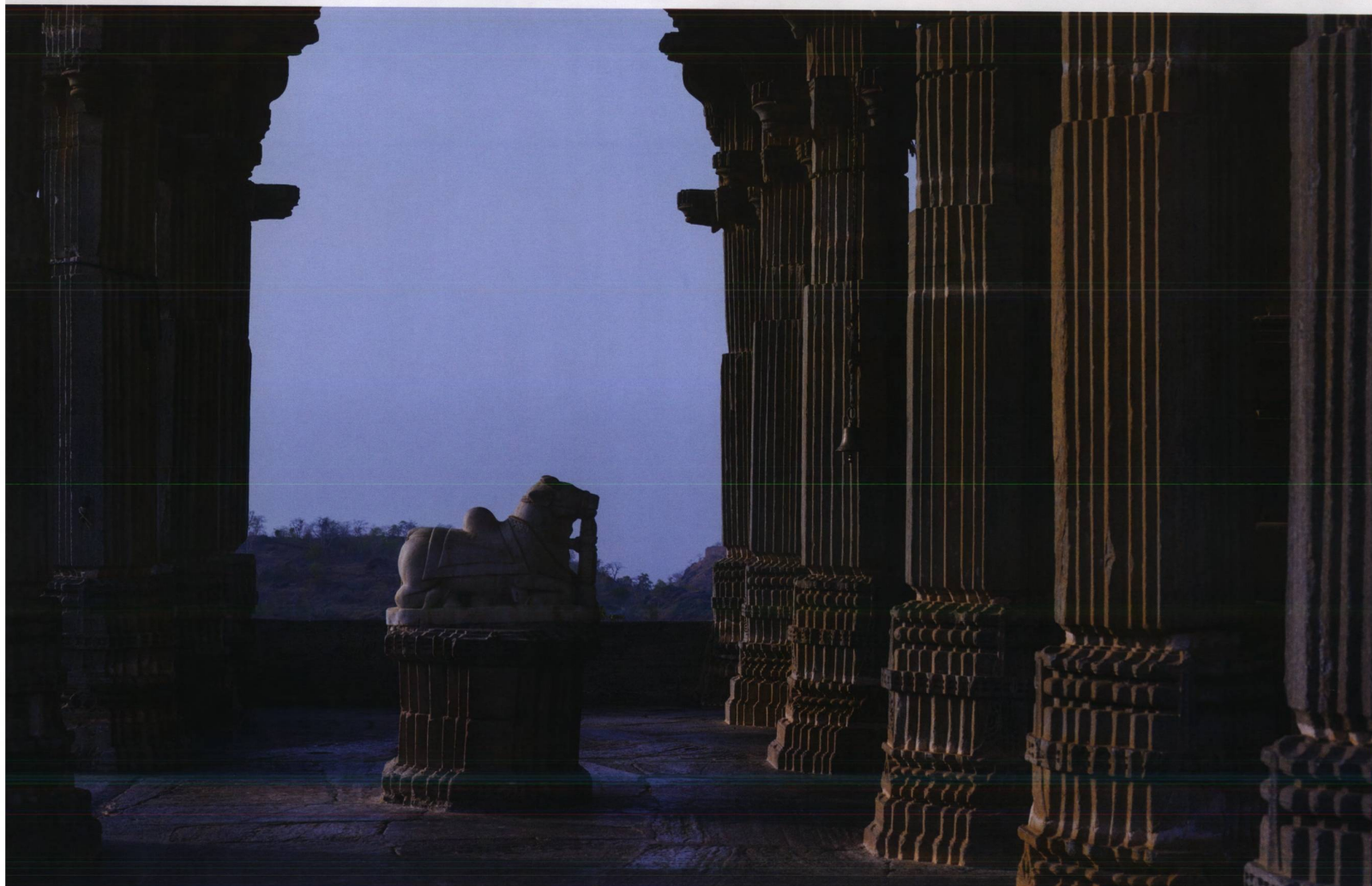
Suddenly, turning a corner, you see a massive, fortified gate and beyond it, a string of outsized bastions rising and falling across the peaks and valleys of the Aravallis. Inside the walls of the fort, dominating everything, rise the towers of the fortress-palace where Maharana Pratap was born. It is almost miraculously well preserved, now a shrine to Rajasthan's most storied hero. But below it, all the domestic buildings for the merchants and soldiers who once lived here have disappeared; the populace moved from these steep hills to the well-watered valleys around Udaipur and its lake palaces where the later Mewar maharanas would thrive and prosper. So today, other than the palace, only the ancient temples of Kumbhalgarh remain – and in extraordinary profusion; there are more than 70 surviving, giving an indication of what a flourishing metropolis this once was. A few of the best-preserved in the vicinity of the palace are still active and in worship, visited by a steady trickle of holy men and pilgrims.

The farther you trek from the palace into the interior of the fort, the wilder and more overgrown it becomes. Here, many magnificent groups of temples lie entirely deserted and overcome by camel thorns, inhabited only by black-faced gray langur monkeys. Some of the temples are Hindu, others Jain, and all are clad in gorgeous sculptures of dancing figures, gods, ascetics, and long, elegant Jain Tirthankaras, "the Ford Makers" who in Jain cosmology have shown the route to *moksha* (enlightenment and liberation). Many of these temples

Previous pages: seen here at dusk, Kumbhalgarh Fort sprawls along the Aravalli range, housing temples, palaces, and gardens. Legend has it that at night Maharana Kumbha used to light a giant lamp made of 220 lb of cotton and 110 lb of ghee to provide light to the farmers working nearby. Below: a view inside Vedi Temple (left), which is dedicated to the Jain goddess Vedi and was built by Maharana Kumbha, then later renovated by Maharana Fateh Singh. Defensive measures include spikes on the gates of the fort (right), designed to protect against war elephants. Opposite: Vedi Temple is seen on the left, and in the foreground, Trikota Temple, which is dedicated to Hindu gods







date back to the founding of the fort in the fifteenth century by Maharana Pratap's ancestor Rana Kumbha (reigned 1433–1468), of the Rajput Sisodia clan, who ruled over a vast swathe of central India during that time, before the coming of the Moguls.

Across northern India, stretching from the sands of the Mewar desert to the Himalayan heights of the Punjab Hills, there once lay some two dozen Hindu Rajput principalities. But from the invasion of the first Mogul emperor, Babur, in 1526, the Moguls ate steadily into the territory of the Rajputs. In 1527 at the battle of Khanua, Maharana Pratap's grandfather, Maharana Sangha, was narrowly defeated by the invaders, and so began the steady erosion of Rajput lands at Mogul hands.

From this point the Moguls conquered or allied with, then intermarried with, most of the greatest Rajput dynasties. For more than seven generations the two peoples formed a strong multi-faith and multicultural alliance, with their armies jointly conquering much of the rest of India. By the seventeenth century, most Mogul emperors had been born to Rajput princesses, and the sons of the Rajput chiefs were often schooled in the imperial court, eventually assuming many of its cultural and aesthetic values. In due course, some sons went on to become senior Mogul officials. Maharaja Surjan Singh of the Rajput principality of Bundi, for example, was made governor of Varanasi by Emperor Akbar, and when Surjan Singh returned home from his posting, he brought with him the Mogul artists he had employed to ornament the governor's palace in order to paint his own ancestral fort. In Amer in Rajasthan and Orchha in central India, Rajput magnates erected audience halls closely modeled on those of the Red Fort in Delhi. Some Rajput court poets even described Emperor Akbar as an avatar of Krishna.

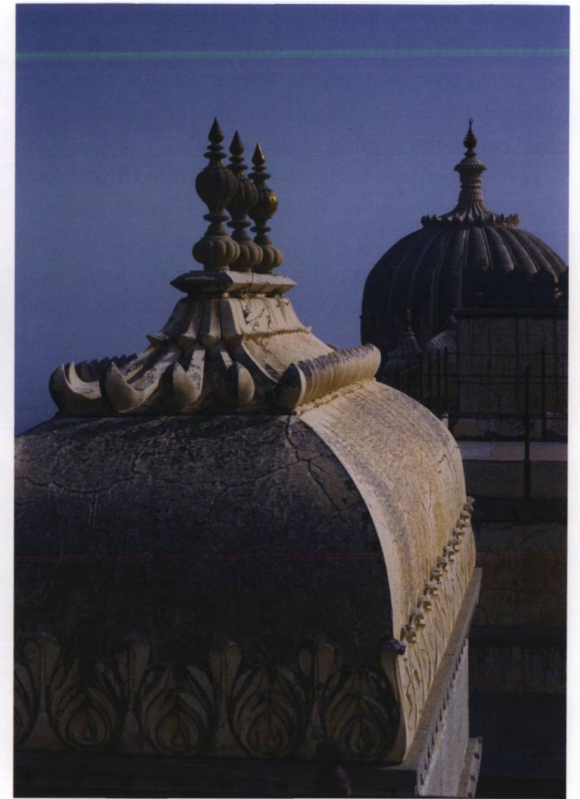
But the maharanas of Mewar would have nothing of it. They stubbornly maintained their cultural as well as their political independence until the end, and, with an extraordinary bravery almost alone of their Rajput peers, resisted what must have appeared as the inexorable tide of history. As a result, their kingdom of Mewar remained the place where Rajput painting and culture survived in what many would claim to be its purest and most romantic form.

Sringara – the representation of love, both in its carnal and divine forms, exploring the delights and traumas of love and lovers – has always been the central Rajput theme, both in the poetry recited in the great halls of Kumbhalgarh and the miniatures and murals painted on its walls, though sadly only fragments of the latter survive. As the Indian art historian B.N. Goswamy wrote, the Rajput painters created a poetic world “saturated in colors and singularly rich in the imagination.”

The nominal independence of the maharanas of Kumbhalgarh continued through the period of the Raj,



Inside the *Badal Mahal*, or the Palace of Clouds, atop the summit within the fort, are rooms reserved for the women of the family (*zenana mahal*) with painted decoration around the doorways (left) and murals that portray some of the local wildlife (above) – here, elephants and a leopard; elsewhere there are camels and crocodiles. Opposite: gray langurs leap along the crenellations that run along the 22 miles of walls (top), the leader holding its tail in the loop shape typical of these north Indian monkeys. The Hindu Neelkanth Mahadev Temple (bottom) was built in 1458. A white marble statue of Nandi, the Sacred Bull, is seen in the pillared *mandapa*, or porch, at the entrance to the temple



and little of Rajasthan was ever directly controlled by the colonial British. Around two-fifths of India's vast landmass always remained under the control of its indigenous princely rulers, and much of this semi-autonomous territory lay in what is now Rajasthan, with the Mewar maharanas regarded as the most senior royals of the region.

The absence of colonial British intrusion had meant that Rajasthan was always a little different from the rest of India, and many aspects of medieval Indian society, lost or modified elsewhere, have survived in Rajasthan quite intact. On one hand, this means that the grip of the old feudal landlords was stronger here than elsewhere, and the practices of untouchability and female infanticide were still common.

On the other hand, castes of nomadic musicians, the Manganiyars and Langas, miniaturists and muralists, jugglers and acrobats, bards and mimes still survive and continue to practice their skills. Many prominent Rajput families, including the direct descendant of Maharana Pratap, the current maharana of Udaipur, still have oral genealogists, musicians, and praise singers, who celebrate the family's lineage and deeds. It is considered a great disgrace if these entertainers are forced by neglect to formally "divorce" their patrons. If so, they break the strings of their instruments and bury them in front of their patron's house, cutting the family off from the accumulated centuries of ancestral songs, stories, and traditions. It is the oral equivalent of a library of books

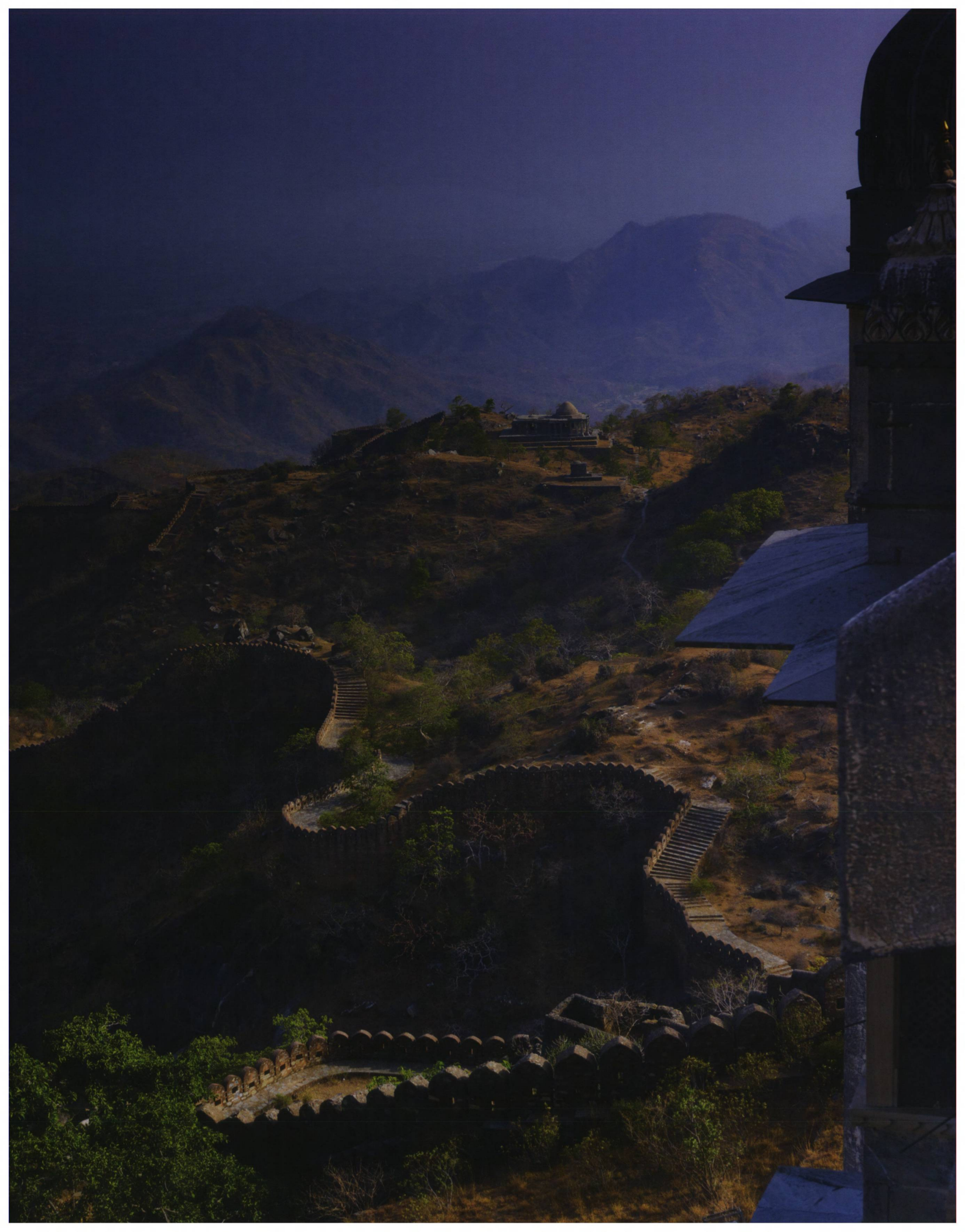
being burned to cinders. Of this world, nowhere has kept its culture as intact as the hills and deserts of Mewar.

Standing at the top of the mighty, impregnable walls looking out over the ancient temples dotting the interior of the fort and the mountainous ravines outside, it is easy to imagine Maharana Pratap Singh standing here, directing his cavalry to cut the supply trains of the Mogul army or readying himself to lead his men into war at the great battle of Haldighati, which gallantly slowed the Mogul advance long enough for the maharana to escape. This allowed him to lead the resistance and fight another day and so maintain his dynasty's independence.

In the end, despite 20 years of fighting the largest army of his day, Maharana Pratap never surrendered, even though he briefly lost Kumbhalgarh and spent much of his middle age hiding from his enemies in the Aravallis. He died a free man, from wounds sustained not at Mogul hands but from a hunting accident. When the news of his death reached the Mogul fort, his long-term adversary, Emperor Akbar, handsomely rewarded the bard brave enough to sing of the maharana's undaunted valor at the court of his lifelong enemy.

As the sun begins to set over the mountains, as the bells of the temples begin to ring for the evening prayer, and as the shepherds begin to lead their chiming flocks back to their shelters for the night (tigers still roam these hills), few could disagree that this magnificent fort is one of the most resonant sites and one of the greatest treasures in all of India. ♦

Above: the walls of Kumbhalgarh are up to 15 ft thick, and there are seven huge fortified gateways, flanked by massive bastions topped with crenellations (left). The dome-topped Palace of Clouds (right), which was built in the nineteenth century, is the highest point of the fort. Opposite: views from the fort extend into the far distance, over the Aravallis, the name of which comes from the Sanskrit for "line of peaks." The mountain range is thought to be one of the oldest geological features that exists on Earth





The new Patek Philippe 1/10th Second Monopusher Chronograph REF. 5470P has a diameter of 41 mm. The diamond set between the lugs in the model's caseband signifies a platinum case. The clarity of the dial enables the legibility of the tenths-of-a-second measurements, which have been made possible by the remarkable caliber CH 29-535 PS 1/10. The new movement has 31 patented elements and a total of 396 parts

PATENTLY CLEAR

STORY

Pierre Maillard

The launch of a new model from Patek Philippe often includes inspired innovations with ingenious twists to make the complex look simple. This new Grand Complication is masterful evidence of a passion to take precision to a whole new level, incorporating 31 patents after an unprecedented 11 years in development

For the first time in history, in April 2022 Patek Philippe unveiled a wristwatch that displays tenths of a second. At once sporty and classic, the new model, named the 1/10th Second Monopusher Chronograph REF. 5470P, immediately stands out due to the precision and legibility of its displays and its striking usability. But behind that supreme clarity, or making that clarity possible, are no fewer than 31 patented innovations.

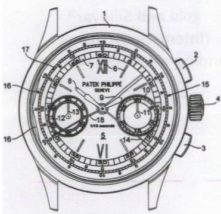
“Without all thirty-one of those patents, this tenths-of-a-second chronograph could not have been realized, at least in this classic size, with such elegance and finesse, and especially with such impressive performance on so many levels. These are qualities of ours that Thierry Stern keeps an eagle eye on,” says Philip Barat.

Mr. Barat is the director of Patek Philippe’s Research and Development division. This team alone comprises more than 160 specialists devoted solely to horological R&D in all its facets: techniques, materials, modeling, laboratory work, the development of movements and

external features, prototyping, production processes, and, particularly relevant here, intellectual property.

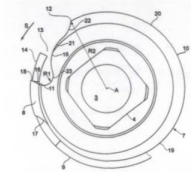
“If it were not for these thirty-one patents,” says Mr. Barat, “including seven filed specifically for this tenths-of-a-second chronograph, six for the base chronograph that inspired it, seventeen for its Oscillomax® regulating organ, and one for the Spiromax® balance spring’s dual-boss design, this timepiece simply would not exist. The watch is a culmination, an encapsulation, of technical innovations. It took eleven years to develop, the longest development program ever conducted at Patek Philippe. But, most importantly, all our research focused on one challenge: achieving total usability.”

Reliability and rate accuracy, strengthened shock resistance, chronometric performance, refined and ergonomic case design, perfect legibility, ease of operation...this model discreetly brings to its owner’s wrist all the innovations and advances that Patek Philippe’s R&D department had set itself to achieve. “We do not

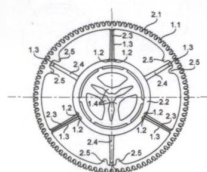


Concentric display
(European patent
EP2671121B1)

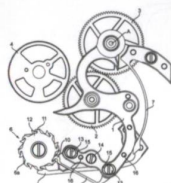
7 NEW PATENTS FOR THE REF. 5470P-001 MECHANISM



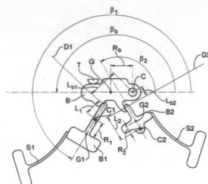
Notch in the barrel arbor
(European patent
EP3320402B1)



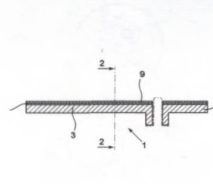
1/10 driving wheel with
anti-backlash feature
(European patent
EP3042250B1)



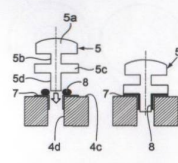
Chronograph with
shock-absorber hook
(European patent
EP2945029B1)



Pendulum shock-absorber
(European patent
EP3364254B1)

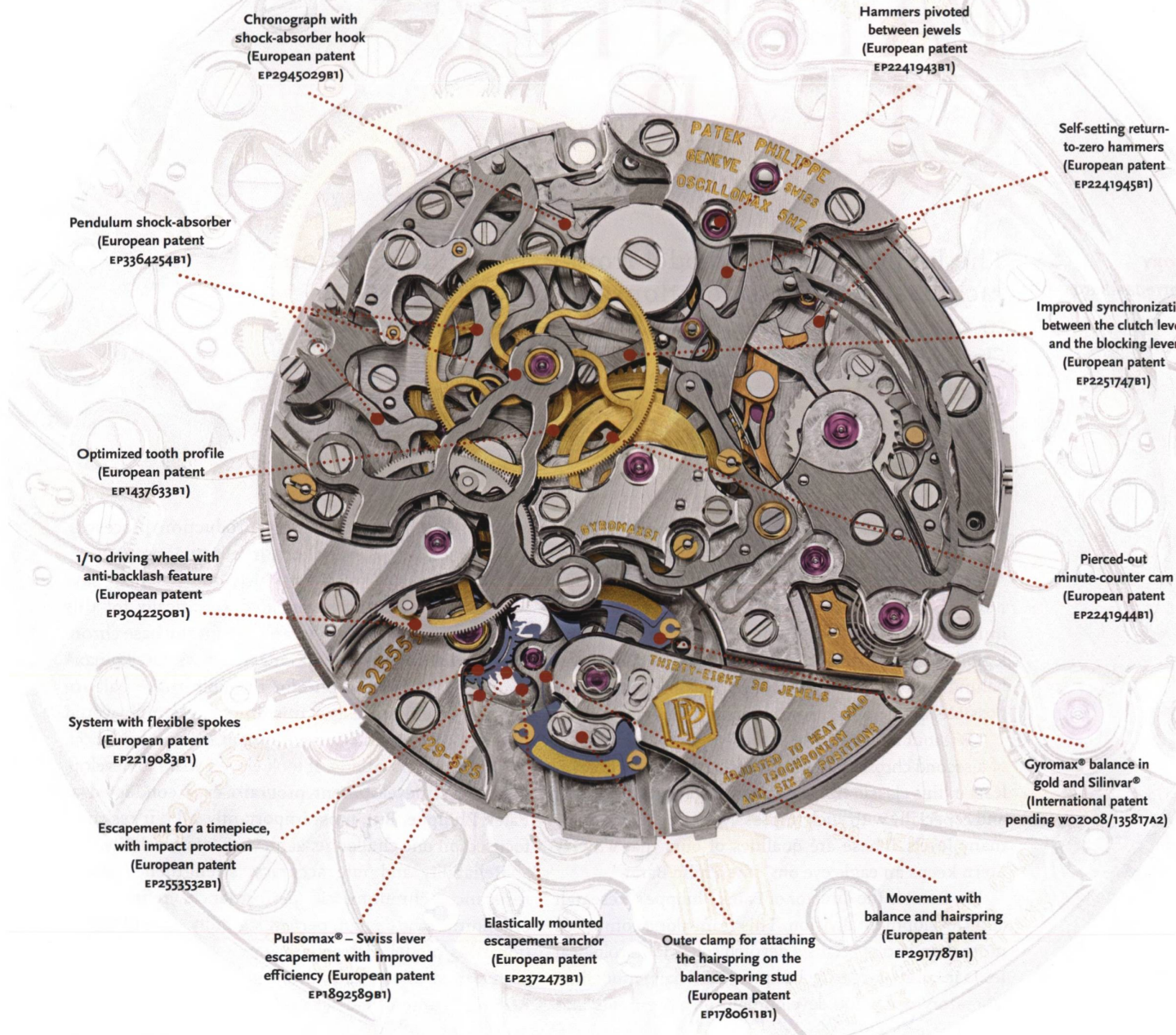


Surface primer for
the silicon hand
(European patent pending
EP3764167A1)



Assembly process for
watch components
(European patent
EP3309624B1)

CH 29-535 PS 1/10 COMPRISING 31 PATENTS: 15 PATENTS VISIBLE ON THE BRIDGE SIDE



Chronograph with shock-absorber hook (European patent EP2945029B1)

Hammers pivoted between jewels (European patent EP2241943B1)

Self-setting return-to-zero hammers (European patent EP2241945B1)

Pendulum shock-absorber (European patent EP3364254B1)

Improved synchronization between the clutch lever and the blocking lever (European patent EP2251747B1)

Optimized tooth profile (European patent EP1437633B1)

1/10 driving wheel with anti-backlash feature (European patent EP3042250B1)

Pierced-out minute-counter cam (European patent EP2241944B1)

System with flexible spokes (European patent EP2219083B1)

Escapement for a timepiece, with impact protection (European patent EP2553532B1)

Cyromax® balance in gold and Silinvar® (International patent pending w02008/135817A2)

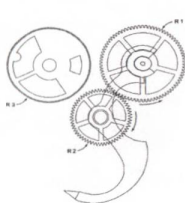
Pulsomax® – Swiss lever escapement with improved efficiency (European patent EP1892589B1)

Elastically mounted escapement anchor (European patent EP2372473B1)

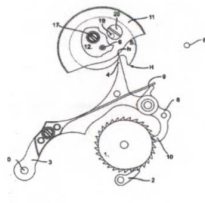
Outer clamp for attaching the hairspring on the balance-spring stud (European patent EP1780611B1)

Movement with balance and hairspring (European patent EP2917787B1)

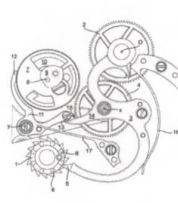
6 PATENTS FOR THE CH 29-535 PS



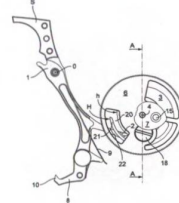
Optimized tooth profile (European patent EP1437633B1)



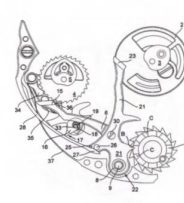
Improved penetration adjustment between the clutch and the chronograph wheel (European patent EP1953612B1)



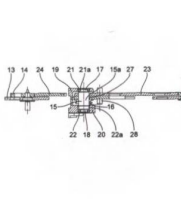
Improved synchronization between the clutch lever and the blocking lever (European patent EP2251747B1)



Pierced-out minute-counter cam (European patent EP2241944B1)



Self-setting return-to-zero hammers (European patent EP2241945B1)



Hammers pivoted between jewels (European patent EP2241943B1)

The REF. 5470P's *feuille* hour and minute hands are 18k white gold and have a luminous coating. The sword hands for the small seconds and the 30-minute counter are also 18k white gold, while the chronograph hand is made of sandblasted steel that has been rhodium-plated. The tenths-of-a-second hand is made of Silinvar® that has been lacquered in red using a newly patented method for priming a silicon-oxide surface (EP3764167A1). A new assembly process (EP3309624B1) for joining two base materials, one of which is non-metallic, allows the pipe of the Silinvar® hand to be brazed



file applications for patents lightly, for the pleasure of lengthening our list," says Philip Barat. "We file them with a view to how beneficial these breakthroughs will ultimately be to our customers, however hidden and technical the advances may sometimes seem."

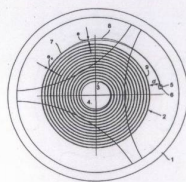
The main aim was for the dial to allow instantaneous and intuitive reading of tenths of a second – a mere breath of time! The solution proposed by the REF. 5470P is unique. Set on a dark-blue background, the red tenths-of-a-second center hand rotates once around the dial every 12 seconds. With each second, it sweeps across one of the 12 sectors that form the railway-track scale on the periphery of the dial, each representing a full second. Each sector is denoted by a red marker and subdivided into 10 jumps, that is, 10 tenths of a second.

When the chronograph is engaged by pressing on the monopusher at two o'clock, the two center chronograph

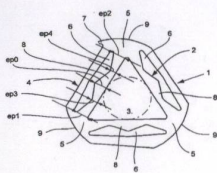
hands, hitherto superposed, set off simultaneously. The gray seconds hand performs a conventional 60-second revolution of the dial, and the red tenths-of-a-second hand makes one revolution every 12 seconds. When the chronograph is stopped, the user can intuitively read the number of seconds that have elapsed, as shown by the gray hand pointing to the white gold pearl-shaped minute markers, and the number of tenths of a second, as indicated by the red hand within one of the 12 sectors of the railway-track scale. The elapsed minutes can be read off the instantaneous 30-minute counter located at three o'clock. Meanwhile, at nine o'clock, the small seconds sub-dial continues to indicate passing time unperturbed.

It is clear that Patek Philippe's dedication to research and development played a pivotal role in the creation of this exceptional chronograph. But the manufacture's

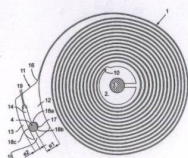
18 PATENTS FOR THE DEVELOPMENT OF THE OSCILLOMAX® ENSEMBLE AND SPIROMAX®



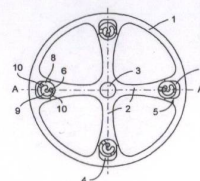
Spiromax® with outer boss
(European patent EP2224293B1)



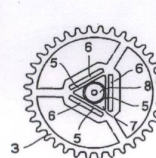
Collet for press-fitting a hairspring on the arbor of a balance
(European patent EP1637940B1)



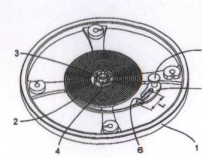
Attachment with integrated balance-spring stud
(European patent pending EP1515200A1)



Inertial balance
(European patent pending EP1705534A1)



Escape wheel in Silinvar®
(European patent pending EP1708045A2)



Outer clamp for attaching the hairspring on the balance-spring stud
(European patent EP1780611B1)



A sapphire crystal caseback allows you to see the caliber inside the sporty, high-performance REF. 5470P. The strap is of calfskin, with an embossed fabric pattern and hand-stitched red seams that contrast with the navy-blue color, like the red highlights on the dial that clearly pick out the 12 sectors for the tenths-of-a-second measurement. Matching with the red hand, the sectors are easily differentiated from the chronograph hand timing indications guided by the pearl-shaped markers and the 30-minute-counter sub-dial at three o'clock. The small seconds sub-dial at nine o'clock completes the time indications

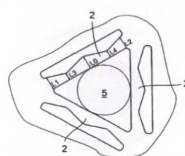
history was also an asset. As early as 1856, Patek Philippe was carving out a reputation for excellence with its pocket chronographs, with or without split-seconds and often combined with a perpetual calendar or a minute repeater. In 1923, the company unveiled its first split-seconds wrist chronograph (a private commission), followed by its first wrist-chronograph series, launched in 1927 and available with or without split-seconds. And in 1930 to 1931 the company even released a pocket watch endowed with a tenths-of-a-second chronograph.

Fast-forward to this century, when, as from 2005, Patek Philippe has designed, developed, and built, entirely in its own workshops, a complete range of chronograph movements, from simple models to others equipped with split-seconds, a minute repeater,

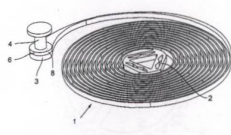
a perpetual calendar, an annual calendar, or even world time. More than 20 versions of chronographs, for men and women, are now available in the regular collection. In its own way, the REF. 5470P is the crowning achievement of this long history, worthy of its prominent place in the Grand Complications collection.

It is impossible to go into all the details of the years of research required to achieve this feat of engineering. The basis for development was the caliber CH 29-535 PS, which launched in 2009 inside the REF. 7071 Ladies First Chronograph. This manually wound caliber, with column-wheel control and a horizontal wheel clutch, is endowed with six patented innovations.

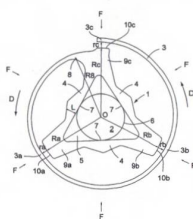
In order for the new REF. 5470P to be able to display the tenths of a second, the first task was to increase



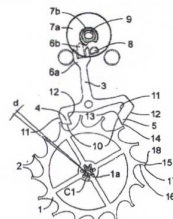
Elastic holding device
(European patent
EP1826635B1)



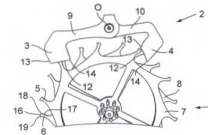
Press-fit process
(European patent
EP1850193B1)



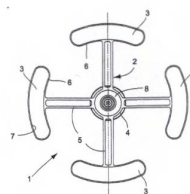
Hairspring-collet
assembly (International
patent pending
WO2007/132306A2)



Pulsomax® – Swiss lever
escapement with improved
efficiency (European patent
EP1892589B1)



Swiss lever escapement
(Swiss patent CH202689B1)



Gyromax® balance
in gold and Silivar®
(International patent
pending WO2008/135817A2)

the frequency of the CH 29-535 PS movement, raising it from 4 Hz (28,800 semi-oscillations per hour, enabling eight jumps of the hand per second) to 5 Hz (36,000 semi-oscillations per hour, the only frequency able to execute 10 jumps per second, thereby allowing the tenths of a second to be displayed).

But if this tenths-of-a-second hand rotated at the speed of one revolution of the dial per minute, how could the user possibly read the tenths of a second clearly and intuitively? The scale's graduations would be far too small. To solve this problem, the engineers decided to add two independent but coordinated chronograph mechanisms to the new caliber (CH 29-535 PS 1/10). One is for the seconds and the instantaneous 30-minute counter, and the other, performing one revolution per 12 seconds, or 12 sets of 10 jumps, is devoted solely

decided to incorporate, for the first time in its regular collection, the Oscillomax® ensemble that launched in 2011 and is distinguished by 17 patents. (This ensemble had previously been reserved for the Advanced Research Perpetual Calendar REF. 5550P of 2011.) Other highly technical patents are designed to guarantee that the hand moves fluidly, without risk of vibration, and to ensure the precision of the display by means of a new driving wheel, the elasticity of which enables it to accelerate by turning five times faster thanks to the pinion's microtoothing (there are 136 teeth on a diameter of 1.469 mm and with a tooth height of 30 microns).

Lastly, two new patents protect the movement from shocks, both by securing the chronograph's clutch rocker when the mechanism is in action and by balancing the accelerations caused by jolts or knocks to the components. Thanks to this system, the shocks compensate each other rather than cumulate, and the parts remain in their required position.

A final detail, and by no means an insignificant one, is that set on a blue dial with 18k white gold applied Breguet numerals and a minute scale of small, white gold pearl-shaped markers, the red tenths-of-a-second hand is a summation of high technology. This rapid tenths-of-a-second center hand is made of Silinvar®, a material selected for its lightness combined with rigidity, which is essential for shock absorbance. This is the first time that Patek Philippe has used the material for an external feature of a watch. The attachment of the pipe from the hour wheel to the Silinvar® hand is the subject of another patent, as is the unique process allowing Silinvar® to be lacquered, here in red.

Patented right down to the lacquer on its hand, sporty and elegant, and mounted on a calfskin strap embossed with a fabric motif and decorated with red topstitching, the 1/10th Second Monopusher Chronograph REF. 5470P displays a clarity of purpose that makes it fit for every occasion. And isn't it a sign of greatness to conceal formidable complexity beneath a seemingly simple exterior? ♦

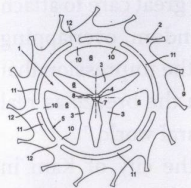
Translated by Barbara Caffin

THE WATCH IS A CULMINATION, AN ENCAPSULATION, OF TECHNICAL INNOVATIONS

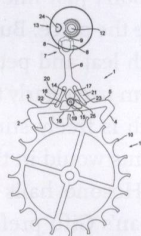
to displaying stopped tenths of a second within one of the 12 sectors encircling the outer periphery of the dial. On the example shown here (opposite), the eye understands instantly that the chronograph is displaying 20 seconds and zero tenths of a second.

To provide the energy needed to guarantee rate stability in these two mechanisms, the engineers optimized the single mainspring barrel by decreasing the diameter of the central arbor and increasing the number of mainspring coils. And to counter the risk of additional stress, a patented notch on the mainspring hook eliminates any risk of breakage during winding – a small but important detail.

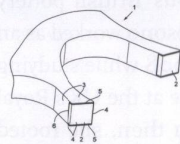
To control and regulate the entire movement with optimum rate accuracy and stability, Patek Philippe



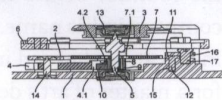
System with flexible spokes
(European patent
EP2219083B1)



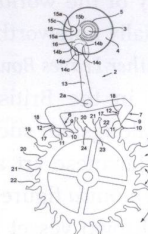
Elastically mounted
escapement anchor
(European patent
EP2372473B1)



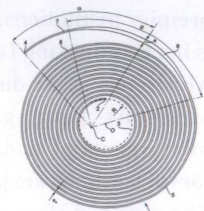
Component and process
(European patent
EP2472340B1)



Component
(European patent
EP2570868B1)



Escapement for a timepiece,
with impact protection
(European patent
EP2553532B1)



Movement with
balance and hairspring
(European patent
EP2917787B1)

FLOURISHING IN CLAY

STORY Yuka Hasegawa

PHOTOGRAPHS Felicity McCabe

The beauty of botanical shapes and textures, leaves and petals entwining and unfurling, is captured in Hitomi Hosono's works so evocatively that you think the porcelain forms may rustle in a breeze or yield to a fingertip touch. With each piece being a true labor of love, the artist explains her creative inspiration

One-of-a-kind works of art that begin as simple ceramic vessels formed by the warmth of the human hand and end covered in flowers, leaves, and branches that have been made with the precision and delicacy of miniature paintings – this is the iconic style of Hitomi Hosono, a Japanese ceramic artist based in London. Surely it takes only one glance for any observer of her works to be spellbound by the profound presence of plant forms that appear so imbued with life.

Hosono's botanical works, which made their debut in 2010 at the eminent TEFAF international art fair, held annually in the Netherlands, are now displayed in the permanent collections of many of the world's premier institutions. Especially noteworthy is her breathtaking *Large Feather Leaves Bowl*, which has been displayed in the British Museum's Japan gallery alongside such monuments of traditional Japanese art as *Jōmon* earthenware jars and *haniwa* figures. The entire surface of the thrown vessel is covered, inside and out, with porcelain leaves that appear to dance so gaily that you can almost hear them crinkling in a gust of wind. Hosono herself described the work as one

of the most fully engaged of her creations to date. "As I worked on it," she explains, "I imagined a wind rising from the earth and whispering across each light, feathery leaf.

"It took me almost a year to complete the piece, patiently and carefully performing each task by hand, from the creation and decoration of the reliefs to the time required to dry the vessel." These exquisitely detailed reliefs are the basis of Hosono's artistic style. They are known as "sprigs" among ceramists, and the technique of applying such decorative elements to a vessel to create a cameo effect is called "sprigging." The technique can be traced back to sixth-century Rome, but it was perfected through trial and error in the 1770s by Josiah Wedgwood, the founder of the famous British pottery company in his name. Hosono worked as an intern at Wedgwood in 2008 while studying for a master of art's degree at the UK's Royal College of Art, and from then, she rooted her work in the superb sprigging technique.

"In making the porcelain sprigs that are essential to my work, the most important thing is to create prototypical models that are one hundred per cent convincing. While

molding the clay based on sketches and such, I make shapes that fuse with my interpretation and imagination. Then I carve the fine details using many special tools, such as dental equipment that I've modified for my own purposes, and I bake the pieces in an oven." After that, Hosono makes casts of the finished models in latex, creates silicone molds from those, and takes another cast in plaster, from which the final porcelain sprigs are made and hand-carved to give a three-dimensional effect and add expression. What awaits her next is the painstaking process of attaching each of the hundreds of leaf or petal reliefs to the vessel, one by one. "I don't just line them up prettily to decorate the piece. But I take great care to attach each leaf and petal at random, overlapping them irregularly to give the impression that each is freely stirring in the breeze as real plants would in the natural world."

Hosono hails from the city of Kani in Japan's Gifu prefecture, close to one of the homes of the area's outstanding Mino ware ceramics. Her grandfather was a tile craftsman, which meant that Hosono was deeply familiar with ceramic art and craftsmanship

The ceramic artist Hitomi Hosono is seen here with *A Komorebi Tower*, one of her 2017 porcelain works (height 10.4 in), which is molded, carved, pierced, and hand-built, and also features gold-leaf details. The Japanese word *komorebi* is a term for the dappled light that is created when sunlight is filtered through a canopy of trees





from a young age. “We were farmers, so I always lived among rice paddies and mountains, surrounded by nature and flowers,” Hosono says softly, recalling her childhood. “That is why my works include such typically Japanese plants as chrysanthemums and cherry blossoms, *nazuna* (shepherd’s purse), and pine.” This is not to say that, in creating the reliefs that are the core of her work, Hosono merely captures forms as they exist in nature. Rather, she tells us that what she does is distill and interpret her encounters with the beautiful things from her childhood memories and past experiences in her own way and lets these influence her works.

After studying ceramics at a Japanese art college, Hosono attended art school in Denmark, then moved to the UK to continue her education at the Royal College of Art in 2007. She has been based in England ever since. “Much of the decor in English homes – the furniture, the exposed beams and such – traditionally consists of plant motifs. Everywhere you go, too, there are parks and

woods. I think the English people’s love of nature has permeated my life and exerts an enormous influence on my ceramic work,” she says. Hosono created *Large Wisteria Tower* (see above, left) after she was deeply moved by the sight of the wisteria-covered exterior walls of St. Paul’s Cathedral in London. She wanted to capture the subtle

“I THINK OF IT AS MY JOB TO BREATHE INTO MY MATERIALS THE TEXTURE AND SCENT OF A PLANT”

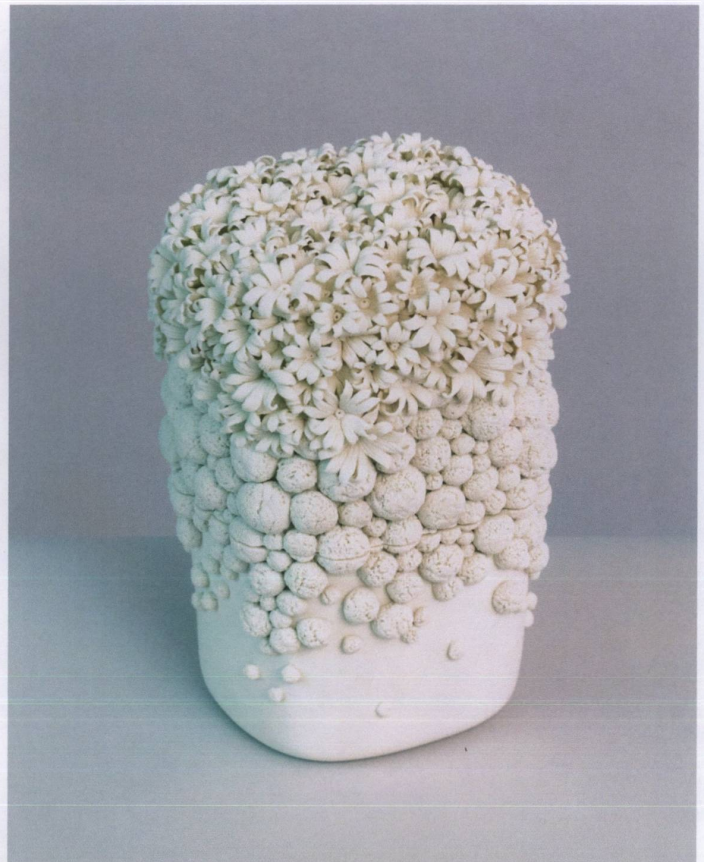
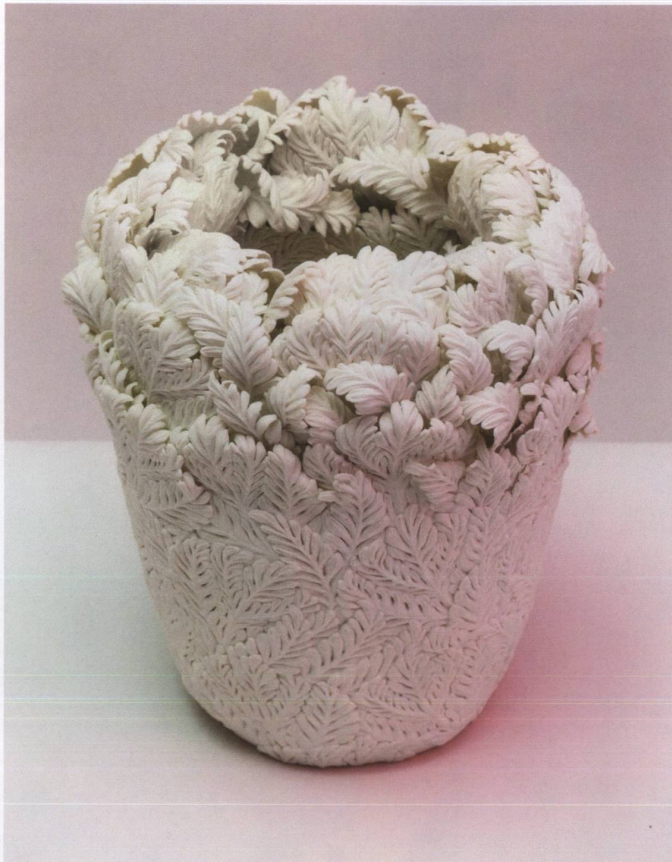
way the wisteria blossoms peek out here and there from among the leaves. “I love the way the wisteria doesn’t bloom so wildly that it takes possession of the wall, but rather it fuses with what is already there and gently envelops it, blooming where it wants to.”

Hosono says she likes to stroll through woods and parks on free weekends, taking time to touch the plants she finds on the way.

“I must look a little strange to anyone who sees me,” she says with a laugh. “But the act of physically touching things is very important to me.” She says she is always thinking about how she can use clay to express what it feels like to touch petals, the soft swelling of the parts where buds form, the veins on the backs of leaves, and so forth. “I think of it as my job to breathe into my materials, into my clay, the texture and scent of a plant and the thoughts and memories that come back to life when you touch it.” Conversely, there are also times when handling the clay gradually gives reality and three-dimensionality to images that have been vague until then.

“Seriously encountering the clay and conversing with it while working it with the hands, it tells us a great deal.” This is Hosono’s unique creative process, which is far from simply turning two-dimensional designs drawn on paper into clay shapes.

Having been baked in a kiln, porcelain objects are by nature unyielding still lifes, but Hosono sees herself as breathing a sense



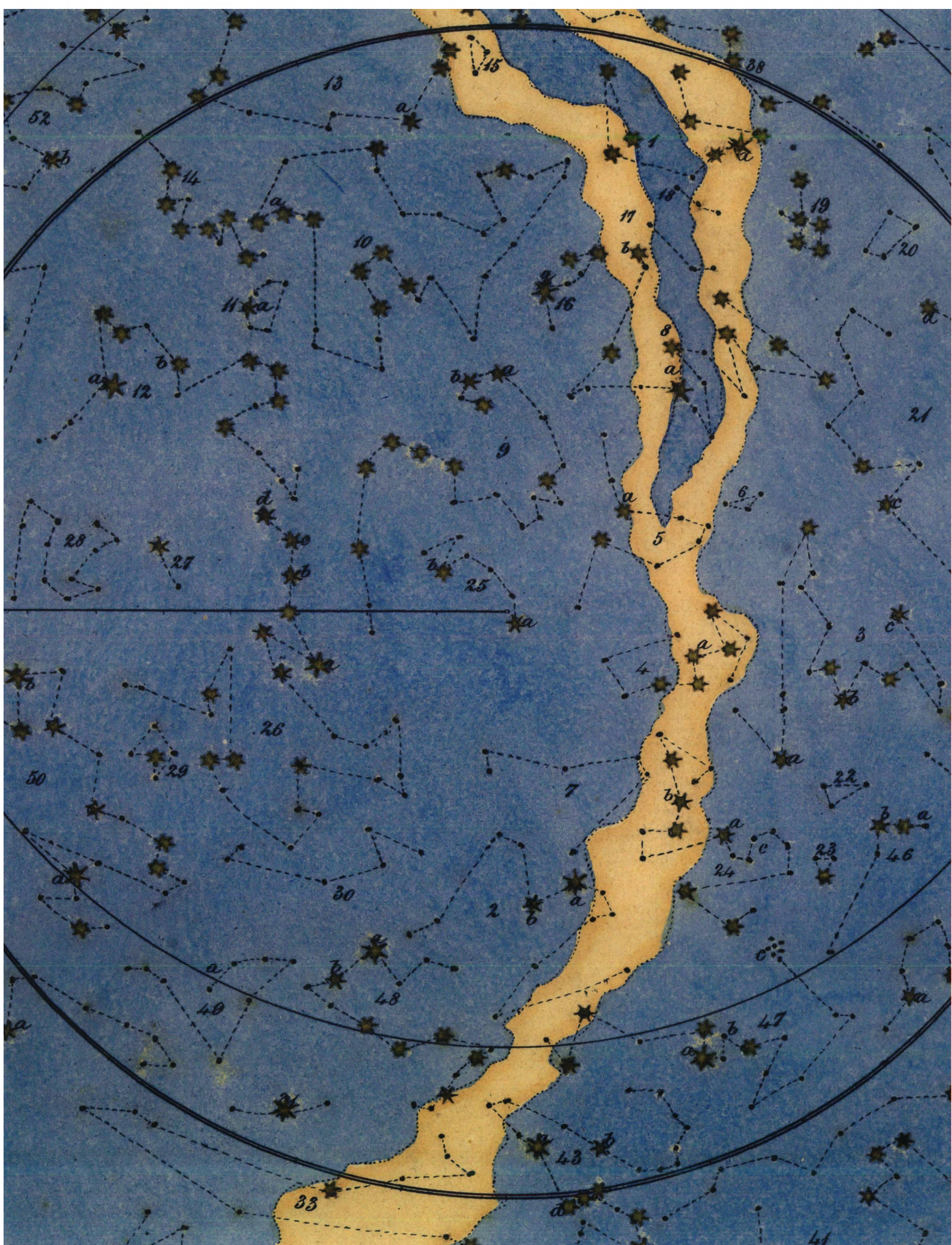
Opposite: *Large Wisteria Tower* (left; height 17.3 in), made by Hosono in 2012, depicts blooms among abundant leaves. A *Pale Peach Cherry Blossom Box, Dancing Top*, 2015 (right; height 7.9 in), is an example of her works that include colored porcelain and gilded interiors in yellow, white, or red gold. Hosono says she likes the surprise that the

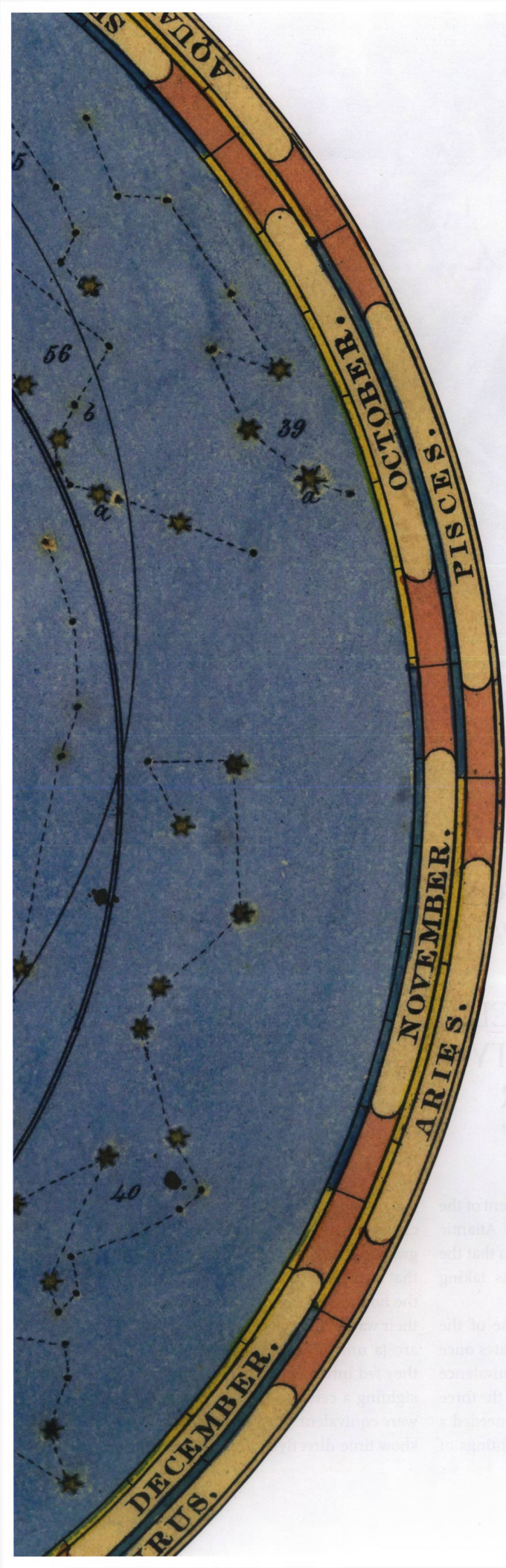
contrast creates. This page: the bushy leaves curling on *A Hawthorn Tower*, 2020 (top left; height 9.7 in), were attached from the top down; azalea flowers and daisies mingle on *A Tall Tsutsuji and English Daisy Box*, 2020 (top right; height 9 in); a detail of the flower-filled inside of *A Pine Tree and Mugiwara-giku Bowl*, 2019 (bottom right; height 5.9 in)

of light and air into her works and imbuing them with movement. Most of her works to date have been solid structures, thickly covered with reliefs, but from now on, she says, she wants to create things that feel more like a flow of flowers and plants that move with a life force. "In Japan, we have the expression, 'The spirit resides within.' I believe that living things such as flowers and trees possess a spirit within themselves just as humans do. I will be happy if people who see the works that I've created by interacting with nature can feel the grand spirit that the natural world possesses and the magnificent power that surges up from the earth." ♦

Translated by Jay Rubin







STORY
David Rooney

FINDING THE WAY ACROSS THE WILD BLUE YONDER

In the early years of aviation, long before computers and satellite navigation, pilots battled with compasses, clocks, and calculations to try to work out where they were in the empty sky – difficult, when you had your hands full piloting the plane. To the aid of intrepid aviators came a clever watch adaptation that simplified things beautifully...

Life moved pretty fast in the early years of aviation. After Orville and Wilbur Wright had made their first faltering flights over the coast of North Carolina in 1903, the world soon woke up to the opportunities of air travel. The first flight in Europe took place in 1906; the first over the English Channel in 1909; and in 1919, John Alcock and Arthur Whitten Brown completed the first nonstop flight across the Atlantic Ocean. Eight years later, in 1927, the world erupted in cheers as the American aviator Charles Lindbergh completed his celebrated Atlantic crossing in the *Spirit of St. Louis*.

Lindbergh was the first to make the crossing alone, meaning he had nobody to help him find his way. Instead, he relied on the navigational techniques known as dead reckoning and pilotage: using a combination of compass, clock, and visual landmarks. When he landed within three miles of his intended target, many assumed he had done well. But he had been lucky. The weather was in his favor. Many other pioneers, including the crews of three US aircraft lost over the Pacific later that year, were not so fortunate.

An alternative to dead reckoning and pilotage was radio location. But many were critical of this newfangled technology. One such sceptic was the US Navy officer and aerial-navigation specialist Philip Van Horn Weems, who wrote, "The radio beam's best effort cannot, to me, compare with the stark independence and simplicity of the star navigator's apparatus and methods."

Weems was referring to the fourth option open to aviators: celestial navigation. But the techniques relying on sextants and timekeepers, developed in the eighteenth century for use on ocean-going ships, were a tough proposition for the aerial navigator, hurtling along in a cramped cabin in a howling gale at over 100 miles per hour, a few thousand feet above the dark and choppy Atlantic with a fuel tank rapidly emptying and the roaring engine setting every part of the aircraft vibrating. It was hardly a place for the careful measurement of celestial positions and extensive mathematical calculations. Charles Lindbergh had said, "We'll trade radio and sextant weight for extra gasoline."

What aerial navigators required was specialist technology – and minimal equipment. When Lindbergh contacted Weems in 1928 asking for instruction in celestial



“THE RADIO BEAM'S BEST EFFORT CANNOT COMPARE WITH THE INDEPENDENCE AND SIMPLICITY OF THE STAR NAVIGATOR”

navigation, it was an acknowledgment of the great risk he had taken over the Atlantic the previous year – and recognition that the Weems system of navigation was taking the aviation world by storm.

Navigators have long made use of the simple principle that the earth rotates once in 24 hours, giving a direct equivalence between time and longitude. But in the three dimensions of the air, navigators needed a new set of terms as they took sightings of

celestial bodies using their sextants. Under the Weems system, measurements of longitude became “hour angles.” A Local Hour Angle represented the longitudinal position of the aircraft, while celestial bodies – the sun or stars – had Greenwich Hour Angles. Finding the Greenwich Hour Angle of the sun throughout the voyage could be done using an accurate timekeeper (corrected as needed by radio time signals), and was later aided by carefully calculated tables of data.

Understanding how this was done and fully comprehending the spherical geometry involved in celestial navigation would come only from digesting Weems's *Air Navigation*, a 400-page textbook filled with equations, charts, graphs, tables, and mathematical diagrams. But what Weems had realized was that navigators lost valuable time converting the hours, minutes, and seconds shown on their watch into the degrees and minutes of arc (a unit of angular measurement) that they fed into navigational calculations after sighting a celestial body. If time and angle were equivalent, why not modify a watch to show time directly as an angular measure?

Pages 40–41: a *Celestial Planisphere or Transparent Star Director* of c. 1850 includes the main star constellations of the northern hemisphere, illustrating, in effect, a map of the sky for aiding navigation. Opposite: the pioneering aviator Charles Lindbergh (1902–74) is shown with the *Spirit of St. Louis* at Roosevelt Field, Long Island, while preparing for his solo nonstop flight across the Atlantic, from New York to Paris.

Right: a map from 1927 shows Lindbergh's 3,600-mile, 33.5-hour route. Right, below: these Patek Philippe aviator watches from the company's Geneva museum collection (left, Inv. No. P-1655; and right, Inv. No. P-844) were made in 1936, nine years after Lindbergh's flight, and represent a huge leap forward in navigation for pilots. They have large black dials and luminous numerals and hands for ease of visibility, as well as the key siderometer display



The hour angle watch, or siderometer (*sidéromètre* in French), was a short-lived but crucial horological specialty. First developed in the early 1930s, these watches could be rated to solar or sidereal time (the difference is slight but significant), depending on if they were used in measurements of the sun or stars. Patek Philippe made two such watches in 1936 (see right). These black-dialed, oversized wristwatches employed modified motion work so that the hour hand rotated once in 24 hours, the minute hand made a full revolution in four hours, and the seconds hand turned fully every four minutes. The scales showed degrees and minutes of arc. At a glance, the navigator could read the Greenwich Hour Angle of the sun directly, without needing a time-consuming conversion. Other makers used the same principles but with different dial configurations.

Whichever way the time was read, with one of these new devices strapped over the sleeve or carefully boxed in the aircraft cockpit the fast-paced life among the stars became slightly easier for the early aerial navigators. But time marched on.

The early 1930s was a period of rapid development in aviation. In 1933, just six years after Charles Lindbergh's pioneering flight, the Boeing company released the Model 247 and Douglas Aircraft constructed the DC-1, firsts in a new breed of aluminum airliners that revolutionized passenger air travel. Advances in navigation followed alongside. Philip Weems himself continued to innovate, and by the time of the Second World War, hour angle watches and siderometers had become outdated. Devices such as navigational plotters and mechanical computers were reaching aircraft cockpits, and developments in the tables, charts, and data available to navigators meant position

fixes could be calculated with greater ease – crucial as airplanes got faster and the sky became ever more crowded.

New technologies such as radar, quartz clocks, inertial navigation, and improved radio location were joined in due course by space-based satellite navigation systems such as GPS, first developed in the 1970s. Celestial navigation was still part of the mix but usually automated, and now just one factor among others. With its hour angle watches now entering the ranks of aviation history, Patek Philippe was free to consider new ways to serve the global

traveler. Local time displays and pilot watches were joined by the remarkable Calibre 89, which included a sidereal display (time told by the stars).

What all these watches have done is show us, each in its own way, our place in space and time as we fly among the stars and look out into the cosmos. In 1931, the former fighter pilot Charles Dixon wrote modestly, "It is easier to fly than navigate." With angle-reading watches by Patek Philippe and others, navigation was made just that little bit easier and safer in the skies of the pioneer age of aviation. ✦



MOVEMENT No. 170 381
Case Ø: 55.3 mm



MOVEMENT No. 170 383
Case Ø: 56 mm

MIXING À LA MODE

STORY

Simon de Burton

PHOTOGRAPHS

Aaron Tilley

The cocktail shaker, developed and honed to refine the craft of mixology, added a stylish touch to hosting at home in the 1920s and 1930s. What nicer way to offer your guests their favorite French 75 or Clover Club than from the perfect-pour beak of a silver penguin or from a finely modeled local-landmark lighthouse?



After being shot with a tranquilizer dart while on assignment in Miami's famous Fontainebleau hotel, James Bond appears characteristically unperturbed on being told by the glamorous pilot, Pussy Galore, that he has awoken at 35,000 feet in Auric Goldfinger's luxuriously appointed Lockheed JetStar en route to Baltimore. Asked by the flight attendant Mei-Lei, in the 1964 film *Goldfinger*, if she can do something for him, Bond replies, "Just a drink. A martini. Shaken, not stirred."

But what type of shaker did Mei-Lei carry onboard her small but well-appointed bar in the sky? Was it one in the shape of a bullet? A lighthouse? A fire extinguisher? Or maybe, in keeping with the scene, an airplane?

All are possibilities, because by 1964 the cocktail shaker had been around for the best part of a century, and it was available in numerous shapes and sizes that were almost as uplifting as the drinks it facilitated.

Although cocktails were being downed in the USA as early as 1806, it was not until 66 years later, when William Harnett from New York applied to patent an "improvement in the apparatus for mixing drinks," that the first reference was made to a two-piece device designed for shaking rather than stirring.

In 1884, that evolved into the classic three-piece shaker comprising body, lid, and built-in strainer and air vent, a simple but effective design that prevails today. Slight variations on the theme emerged with the new century, most of which adopted a teapot shape with a handle and spout to ease pouring. But as the popularity of "American drinks" spread inexorably to the bars, hotels, and drawing rooms of Europe, the First World War came and went, and the Jazz Age welcomed the birth of the "cocktail party," so, accordingly, shakers became more playful.

Not only did the end of the war bring cause for celebration, it also brought a surfeit of materials and production capacity as the demand for munitions tailed off, leaving manufacturers to get creative with brass and copper. And what could be a more

perfect basis for a cocktail shaker, reasoned the enterprising folk at the USA's Gorham Manufacturing Company of Providence, Rhode Island, than the aerodynamic form of an artillery shell? Using the lower part as a container for glasses and the upper part for mixing, the firm made some of the tallest cocktail shakers ever seen, keeping the design in production until 1921.

By then, however, the "manufacture, transportation, and sale of intoxicating liquors" had been banned in the USA under the Prohibition act of 1920. Ironically, as the country's speakeasies appeared, this brought

to the repeal of Prohibition in 1933, the first figurative piece is believed to have been created seven years earlier by the Derby Silver Company. It had the appearance of a miniature golf bag, complete with leather straps and fittings.

The firm was a division of the giant International Silver Company (or ISC), formed in 1898 by the union of numerous individual makers operating in the USA and Canada. Of the ISC's many standout shaker designs, one of the most exceptional, introduced in 1929, took the shape of the Boston lighthouse. Available in two sizes – a 22-inch-high version with a remarkable 230-fluid ounces volume and a less capacious 14-inch, 72-fluid ounces model – the lighthouse shakers featured windows in their sides. The larger model was available with a music box concealed in its base, which played such drink-appropriate tunes as "How Dry I Am" and "Show Me The Way To Go Home."

Only a few "22-inchers" have been recorded, most of which have passed through the hands of Simon Khachadourian, the founder of London's Pullman Gallery and one of the world's most respected specialists in the field of rare and collectible cocktail shakers. "The large-sized lighthouse is incredibly rare and cost six hundred US dollars when it was new. That was the price of a small car in the late 1920s," explains Khachadourian.

"Another important American maker was Napier of Meriden, Connecticut, which manufactured shakers on behalf of various retailers," he continues. "Among the more unusual of its models was one in the shape of a trombone that was made for [the British entrepreneur and inventor] Alfred Dunhill – now very collectible and worth up to fifteen thousand pounds [US\$19,000], and another, in the shape of a penguin, that was designed by Emile Arthur Schuelke and features an opening beak that conceals a rubber stopper and pourer."

One highly coveted design that the Pullman Gallery has handled is the *Zeppelin* shaker, which, according to Khachadourian,



Previous page: the *Boston Lighthouse* cocktail shaker was modeled on the second oldest working lighthouse in the USA, which is on Little Brewster Island in Boston Harbor and dates back to the late eighteenth century. It was available in

two sizes, as shown. **This page:** Asprey's silver-plated *Dumbbell* shakers were often retailed in pairs, like this duo from c. 1935. Particularly covetable are the rare examples of this popular model made from sterling silver

about the creation of 70 per cent of the cocktails with which we are familiar today.

The wealthy, meanwhile, held soirees at home, which presented a golden opportunity for manufacturers to develop novelty cocktail-shaker designs that would reflect their owners' sophistication, spending power, and occasional eccentricity. Innocently labeled "beverage shakers" in the USA prior



From left to right: a 1930s *Bowling Pin* or *Skittle* silver-plated cocktail shaker; the 14.5-in tall 1930s *Thirst Extinguisher* by Asprey takes the form of a fire extinguisher and has the recipes for eight different cocktails engraved on its base; Asprey's *Tells You How* shaker of the 1930s

has an inner gilded sleeve and rotating sleeve on the outside with windows that display the ingredients for 16 of the most popular cocktails of the day; *The Penguin* shaker made by Napier has a hinged beak with a rubber stopper that lifts for accurately pouring the contents once shaken

WHISKY SOUR	SIDE CAR
2 GLASS WHISKY	1/2 BRANDY
1 TEA SPOON SUGAR	1/2 COGNAC
1 LEMON JUICE	1/2 CURACAO
1 ORANGE JUICE	1 LEMON JUICE
ICE	ICE

16 COCKTAILS
 1. WHISKY SOUR
 2. SIDE CAR
 3. BELL WITH EGGS
 4. ANGOSTURA BLEND
 5. ICE

is regarded by many collectors as the ultimate ornamental cocktail shaker. Made during the late 1920s by a company called J.A. Henckels of Solingen, Germany, these silver-plated shakers were available in three sizes (9-, 12-, and 18-inch) and were supplied in a leather traveling case.

Rarer and more valued still is another J.A. Henckels creation that takes the form of a miniature aircraft, comprising 24 components that make up a complete traveling-bar set. The body of the airplane serves as a shaker and contains an internal flask, four cups and spoons, a strainer, corkscrew,

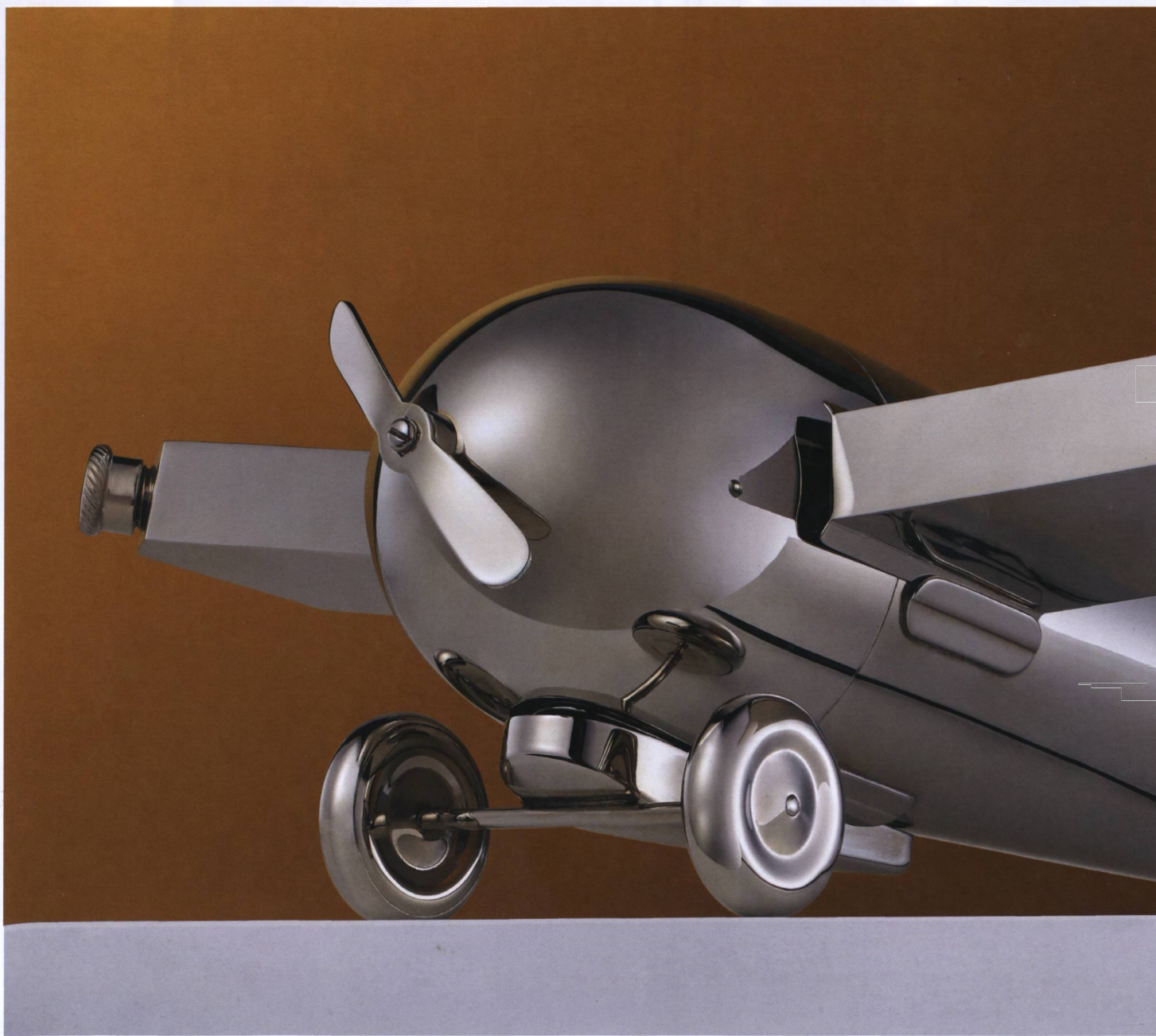
and an olives or nuts box, while each wing detaches to create two further flasks.

In the UK, the celebrated emporium of luxury, Asprey, found a ready market for novelty cocktail shakers among its long roster of wealthy clients, and it produced numerous droll designs, including a pair that resembles dumbbells and others in the shape of shotgun cartridges or bottles of champagne.

But among the most sought-after of Asprey's creations is the silver *Thirst Extinguisher*, an elegant and beautifully crafted shaker fashioned in the form of a fire

extinguisher and engraved around the base with eight popular cocktail recipes.

Like many manufacturers, Asprey also incorporated colored glass into its cocktail-shaker designs, although the fragile nature of the material means surviving examples are quite rare. Among the most prized of these are the trio of *Ship's Lantern* models, styled to represent, respectively, port (red), starboard (green), and mast (clear). "They were produced for a short time during the mid-1930s, but few complete sets have survived. In fact, I have seen only one," says Khachadourian. "The clear-glass version is



the most difficult to find, probably because it was less decorative than its colored counterparts and, therefore, the least popular.”

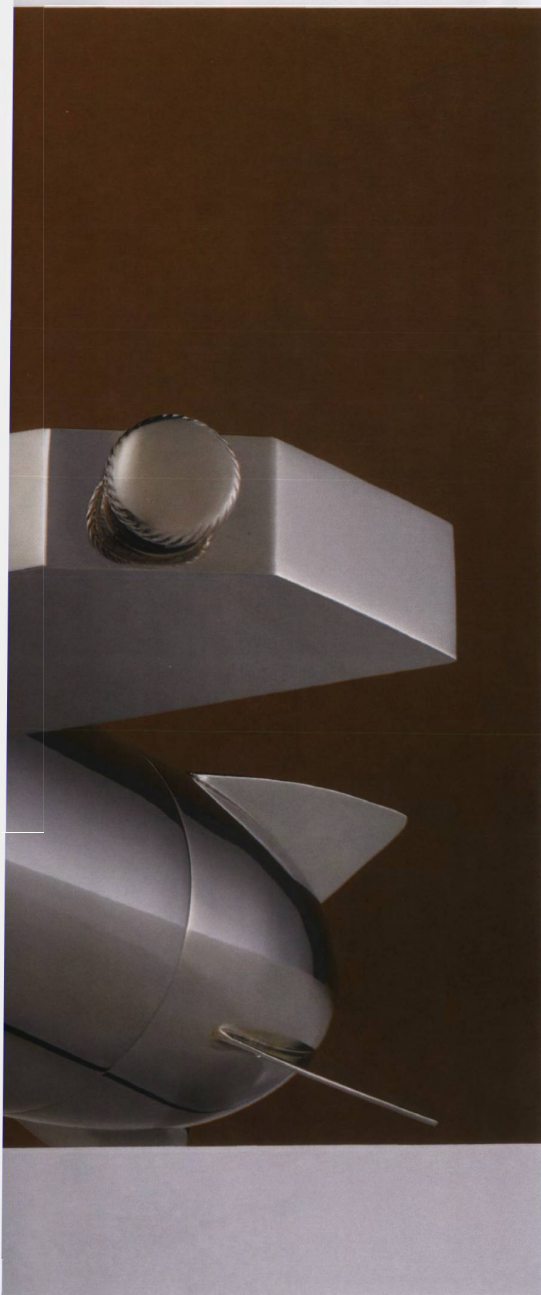
For Matt Hranek, the author of two cocktail books (one on the Negroni, the other on the martini), however, a cocktail shaker is both a decorative item and an essential piece of operational equipment. With his regular celebrations of the joys of the mixed drink, Hranek has attracted almost one hundred thousand followers to his Instagram page. “I have collected shakers for function and decoration for years, and they always make a handsome and useful addition to a

home bar. I have French ones in crystal and American ones in glass, but my absolute favorite cocktail shakers are the simple and inexpensive stainless-steel ones made by Alessi of Italy. I will shake my martinis in them when the gin is warm and use them to make Campari Shakerato, served up in a coupe glass with a twist of orange peel. I just don’t think there’s anything more satisfying than the sound of spirits and ice being slammed around in a cocktail shaker.”

And – so long as it’s not in a clear-glass Asprey mast lantern – Khachadourian would surely drink to that. ♦

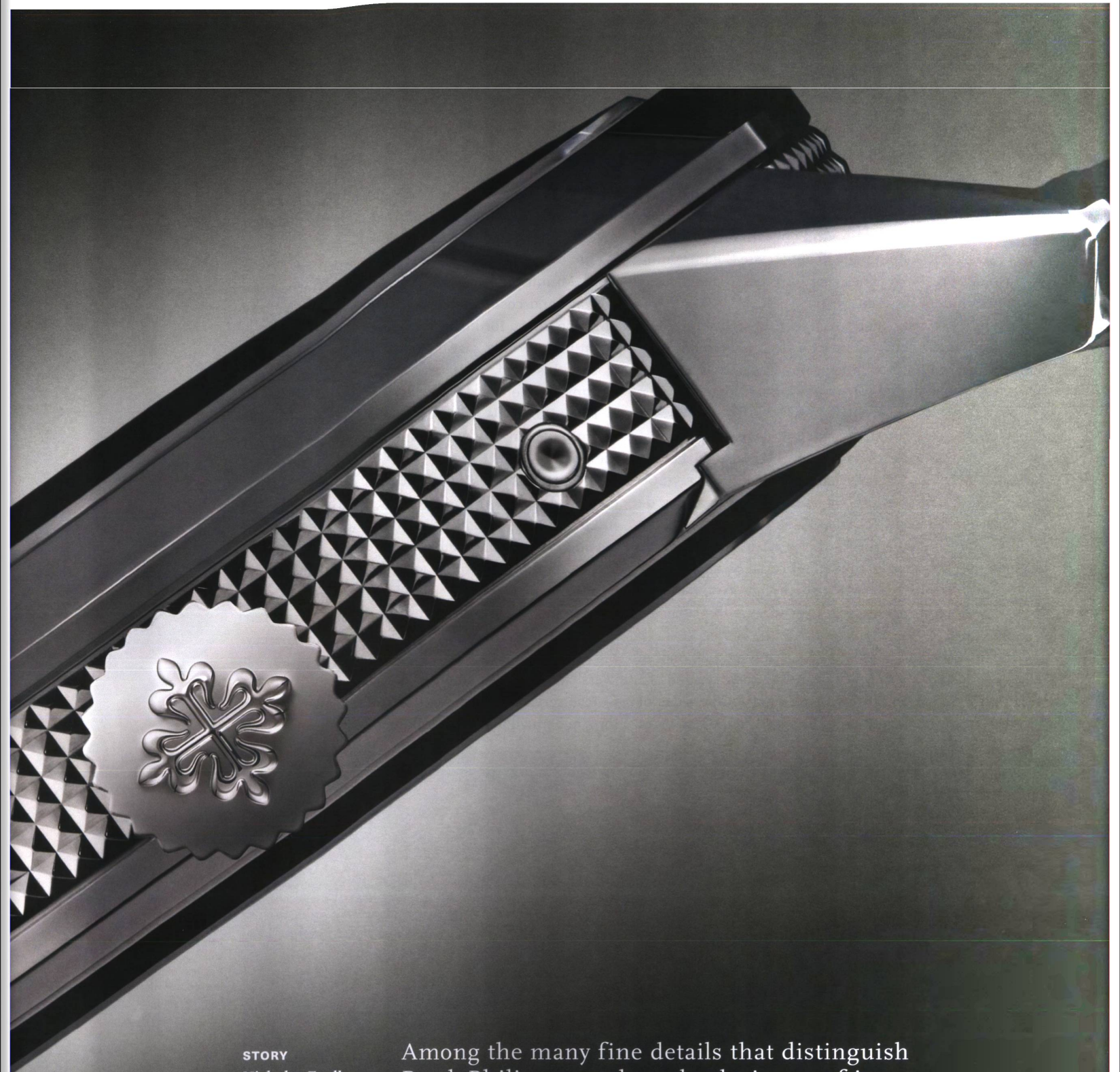
The airplane bar set made by J.A. Henckels in the 1920s reflects the newfound excitement for private-jet flying, which had opened up a very glamorous way to travel. This 12-in-wing-span version is shown fully assembled (below left) and with some of its parts disassembled for use

(below). The fuselage becomes the main shaker (seen at the back); the wings are spirit flasks (on both sides). There’s also a large spirit flask, four shot cups, a corkscrew, four cocktail spoons in a cover that attaches to the airplane’s wheels, and a pot for accompanying nibbles



A CASE FOR AESTHETICS





STORY
Nicholas Foulkes
PHOTOGRAPHS
Jonas Marguet

Among the many fine details that distinguish Patek Philippe watches, the design, crafting, and finishing of a case contribute profoundly to the impression that a timepiece makes. The skills of the artisans are essential, but behind every newly polished, newly made, newly designed case is the spark of creation

Creativity is one of the defining qualities of humanity but also one of the most evanescent. It is impossible to analyze and fully understand. “How can we explain how we create watch cases?” says Thierry Stern. It may sound rhetorical, but this is a genuine question that he is asking of himself. And the answer would be very useful in helping one to appreciate the intriguing case designs on watches that have been launched by Patek Philippe in recent years.

The year 2022 alone has seen a highly inventive and original interpretation of a decorative motif long associated with Patek Philippe: the Clous de Paris bezel. Although the design was in use before the mid-1980s, it was the REF. 3919 Calatrava of 1985 that forever associated Patek Philippe with this gleaming pattern of little pyramids that covers the bezel. Future historians of the technique will note that it was with the REF. 5326G Annual Calendar Travel Time of 2022 that Clous de Paris took a new direction at Patek Philippe, when the decoration migrated from the bezel to the caseband. Moreover, in order that the motif could be applied over the entirety of the caseband’s circumference, a new type of case design had to be developed, one that attached the lugs not to the caseband but to the caseback.

This may not be the first time that the time-honored Clous de Paris motif has appeared on the caseband of a Patek Philippe. It can be appreciated on the sides of the REF. 6300G Grandmaster Chime, and the REF. 5531R

World Time Minute Repeater where the slide to activate the acoustic function is also treated to the same decorative finish to maintain perfect harmony with the caseband. The latter watch, too, required innovatively designed skeletonized lugs that slotted invisibly above and below the caseband.

But even by Patek Philippe standards, the World Time Minute Repeater and the Grandmaster Chime are rare and costly pieces destined to be enjoyed by only the most fortunate few. The marvelous thing about the new REF. 5326G and its sibling, REF. 5226G, is that this bold, yet characteristically discreet case design can be enjoyed by a wider audience.

Patek Philippe’s mastery of the complication needs no introduction. With the combination of two of what the marque calls “useful complications” and eight new patents, the caliber 31-260 PS QA LU FUS 24H ensures that the REF. 5326 executes its functions intuitively and elegantly. But attracting just as much attention at the watch’s launch was its outer appearance, and to reinforce this message, the identical aesthetic treatment was offered in a time-only model, the REF. 5226G. I dare only whisper it, and I sincerely hope that movement purists will forgive the heresy, but could it possibly be that aesthetics have almost overshadowed complications?

It is certainly fair to say that in these two watches form and function are in harmonious equilibrium. This



The 41 mm diameter REF. 5326G (previous spread and left) has a white gold caseband embellished with the Clous de Paris pattern. An innovative design integrates the lugs within the caseback to allow the Clous de Paris motif to extend around the entire caseband. The REF. 5226G (above) is a 40 mm time-only sibling of the REF. 5326, and follows in the design tradition of the Calatrava, the roots of which date back to 1932



The vintage-style dial of the REF. 5326G is distinguished by its anthracite color and its grainy texture, which are reminiscent of old-fashioned cameras. As this close-up photograph shows, the guilloché Clous de Paris design continues under the lugs so that the caseband's harmonious coherency can be enjoyed

A close-up, high-angle photograph of a luxury watch. The watch is made of rose gold, with a highly reflective, polished surface. The dial is black with a sunburst pattern and features white Arabic numerals for the hours. The brand name 'JAEGER-LECOULTRE' is visible on the dial. The watch has a concave bezel and hollowed flanks. The lighting is dramatic, highlighting the curves and textures of the metal.

The case of the 40 mm Annual Calendar REF. 5205, newly launched in rose gold in 2022, is distinguished by the refined architecture of its concave bezel, hollowed flanks, and its open-worked lugs, all of which have been polished by hand. The model's rose gold case and dial features set off the olive-green sunburst dial, which has a black gradient around the rim



IN THESE TIMEPIECES, FORM AND FUNCTION ARE IN HARMONIOUS EQUILIBRIUM



Above: the Perpetual Calendar Chronograph REF. 5970J has been called “one of those very rare ‘perfect watches,’” with its elegant 40 mm case and sculpted lugs. Top: the polished platinum case of the REF. 5370P (left) has a concave bezel and satin-finished flank recesses, while the rose gold REF. 5531 World Time Minute Repeater’s case (right) is adorned with a Clous de Paris pattern, which is visible through the skeletonized lugs

balancing act began just more than a decade ago when Thierry Stern reignited the relationship between the movement and aesthetics, and these two watches are conceptually emblematic of the stewardship of the company by Thierry Stern.

The term *habillement*, literally translated as “clothing,” describes the traditional role of aesthetic design in watchmaking. The creation department was historically at the service of the movement designers, receiving a completed movement that it then had to dress as best it could. But 10 or so years ago, Thierry Stern elevated the role of creation to be as important as movement design. No longer is aesthetics simply the dressing of the mechanism. Today, the two departments are equals, and instead of being a final step to give a skin to mechanisms, the creation team is aware of, and involved in, decisions relating to the development of calibers of the future. At the time of writing, the creation department is working on calibers to be launched up to the year 2030.

Creation has become a discipline of its own at Patek Philippe. Indeed, there is a weekly creation meeting about case design that is attended by Thierry Stern as well as Patrick Cremers, Geneva’s Salon Director; Jérôme Pernici, the company’s Commercial and Marketing Director; and Eric Fague, who is Head of Creation, and in charge of the current collection.

The purpose of the creation meeting is to monitor the progress of designs and to question engineering if any mechanical issues interfere with the achievement

of a design. With about 60 different models under review at any time, such meetings are necessarily busy, but periodically time is made for a delightful exercise known as *séance croquis* – what we might call a sketch meeting – at which ideas from the creation department’s designs are reviewed. It was from such a meeting that the REF. 5226 and REF. 5326 emerged. The original design sketch shows a simple three-hand watch with baton indices and a date window between four and five o’clock. The image is unremarkable until one studies the caseband, encircled in the infinite embrace of Clous de Paris; what is more, the caseback is shown with a quartet of screws, one for each lug, anchoring the horns to it, permitting the entire surface of the sides to be decorated. Like reaching the source of a mighty river that flows for thousands of miles, there is something rather wonderful about traveling right back to the origin of a design that is so simple and yet so drastic.

Although less dramatic in its appearance, another launch of 2022 has spotlighted one of the sustained tropes of the Thierry Stern era in case design: open-worked lugs. It was in 1996 that Patek Philippe invented and patented the annual calendar complication with the launch of the REF. 5035, and in the newer REF. 5205R it is possible to appreciate the transformative effect that case design can have on a classic introduced more than a quarter of a century ago. The calendrical information on the REF. 5205R (see opposite) is read in an arc across the top of the dial from ten o’clock to two



o'clock, while the generously proportioned 24-hour dial and moon phases take up most of the lower half of the olive-green sunburst face. But the architectural beauty of this watch only becomes appreciable once the watch is turned sideways to reveal the open-worked lugs with their smooth curves that seem to melt into the caseband.

Open-worked lugs, such as on the REF. 5205, have become one of the most recognizable signatures of modern-era Patek Philippe case design, and Thierry describes how the idea developed over several prototypes.

"When I saw the first prototype, I thought, 'There is something missing.' With the second one, we started to work on the lugs. I said, 'Let's try to make those lugs a little more concave.' By the third, I said, 'Let's drill them out and see what the lugs look like when they're open.'"

The beauty of these lugs with their polished inner surfaces is that they look as though they have been scooped out in one deft movement. The reality is that polishing and finishing one single lug occupies at least an hour of a skilled craftsman's time.

"There are different types of polishing," explains Thierry, "and there is a technique for polishing inside those lugs, and of course we keep that a secret. Most of

the pieces you will see from other brands that use open lugs will be satinated or brushed."


For the REF. 5370P split-seconds chronograph with a concave bezel, the satin-finishing of the recessed flanks requires the refashioning of the wooden polishing tool after every stroke. And, to perfect the process, the wood of the tool was changed; oak was used traditionally, but that was too hard and was substituted with basswood.

It is likely that more new methods, new tools, and new ways of working will need to be developed for case-making in the years to come, to keep pace with the bounteous crop of ideas from Thierry Stern. New designs teem and jostle in his mind, making themselves known at any moment. Some come as he sleeps, appearing quite literally in his dreams. But they can arrive at any time – even in our meeting, during the discussion of an abstruse aspect of polishing, he announces, "I've just found a new minute repeater!"

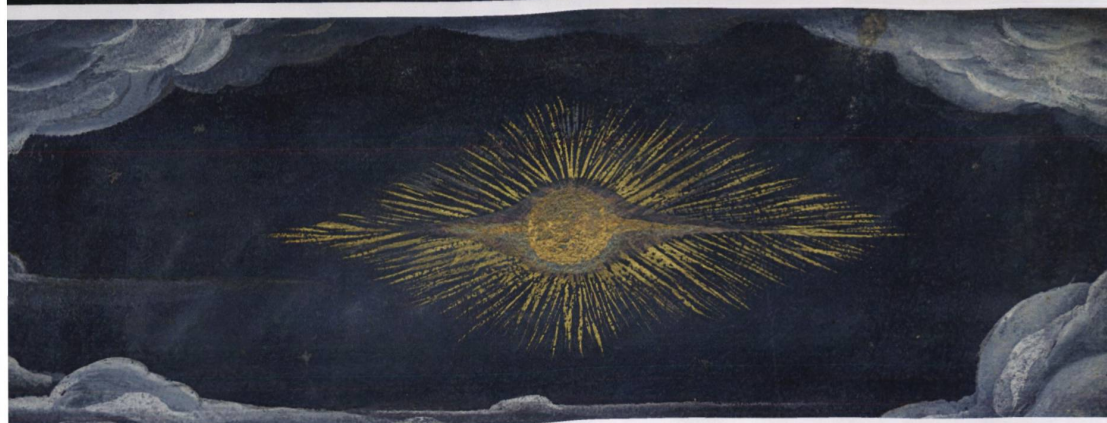
"So what will that look like?" I ask. "Beautiful. But if I tell you, then I will have to keep you here for two years," comes the answer.

One thing is clear: Thierry Stern certainly knows how to keep the creation department busy. ♦

The 39 mm REF. 5227J Calatrava (above) has a sapphire crystal caseback that is protected by an invisibly hinged dust cover (above left). The whole hinge is on the inside of the cover, which means it's hidden when the watch is worn. As the model is only 9.24 mm thick, the tiny hinge is a triumph of craftsmanship and ingenuity. Viewed from the side (opposite), the gently curved flutes sculpted from the caseband into the lugs emphasize an elegant silhouette



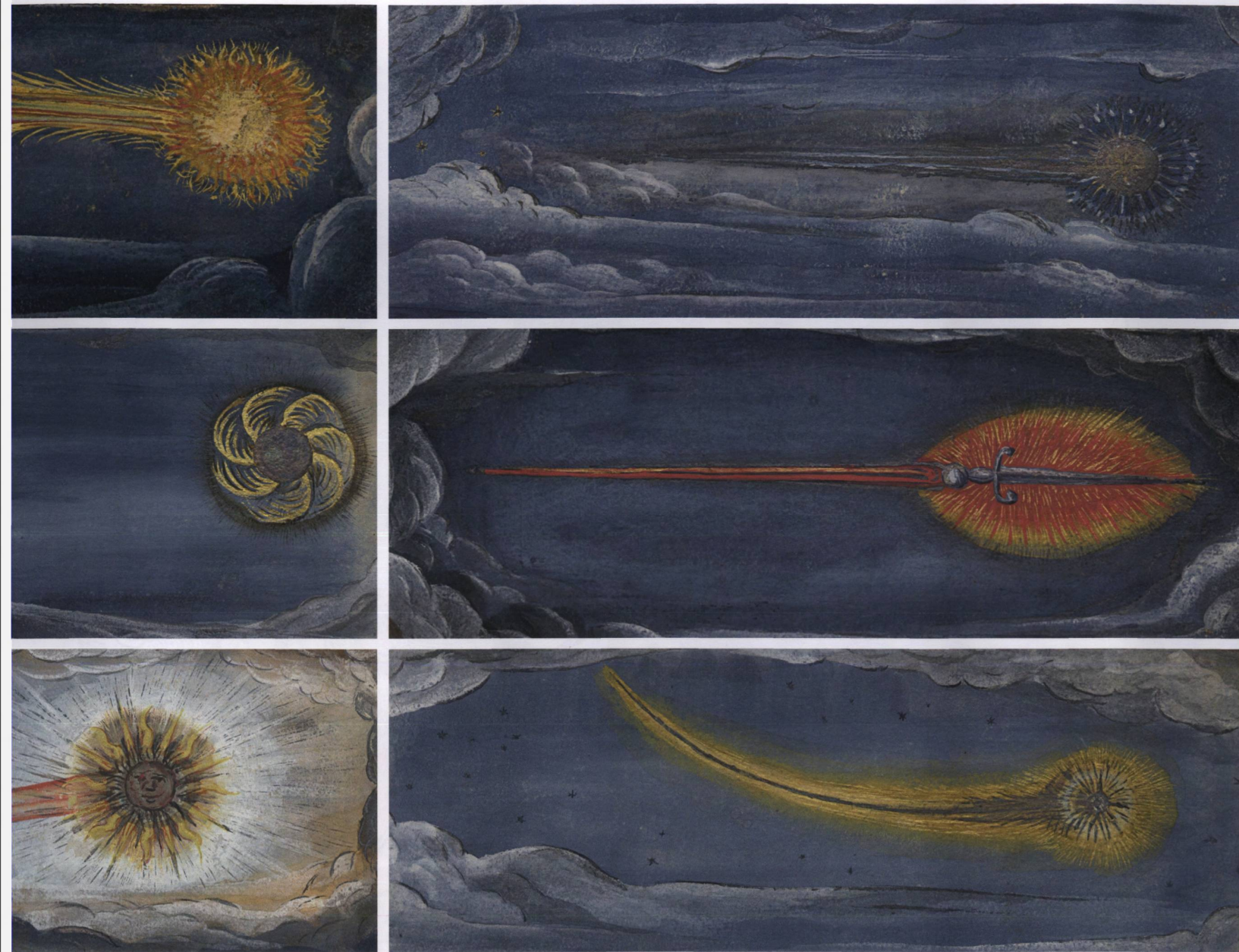
THIERRY STERN ELEVATED
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GREAT BALLS OF FIRE

STORY
Nadeije Laneyrie-Dagen

Comets have been studied for centuries by astronomers who were made famous by their discoveries. But long before we knew what these celestial bodies were made of and why they shot across the sky, artists captured them in wonder and fear. Their depictions now help us to unravel historical understanding of these phenomena



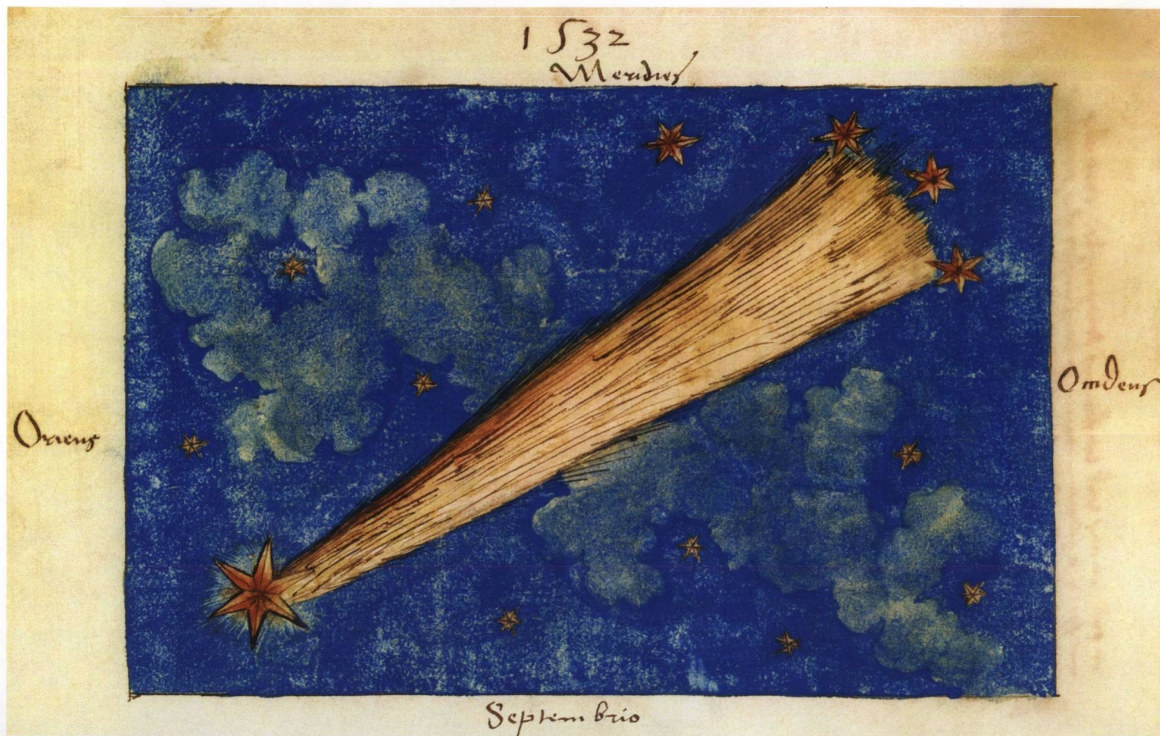
The film *Melancholia*, produced by Lars von Trier in 2011, evoked, in a mode more elegiac than spectacular, an unknown planet approaching Earth, signifying the end of the world. Seen in the sky where once there was nothing, the image of this radiant celestial body appears as a leitmotif until the moment of apocalypse, when its considerably superior mass absorbs the terrestrial globe.

That a planet should suddenly come out of nowhere and collide with Earth is, of course, an unrealistic hypothesis: the orbits of planets are known and will continue in the same paths for as long as the solar system itself exists. Also true is the fact that various circumstances may cause smaller bodies to escape the

regular movement of their orbit through the sky, without danger to us. Comets, which come from peripheral regions of the galaxy, are some such bodies. Made up of ice and dust, they heat up when approaching the sun and emit gases and debris that form the distinctive nebulous coma ("hair") around the nucleus ("head") and the long tail often captured in depictions.

Such objects have been observed since antiquity. One of the earliest attempts to depict their forms was made in China, on a silk scroll dating from the fourth century BC. In the *Metamorphoses*, first published in AD 8, Ovid more gloriously imagined comets as transformations of the souls of great men. In Rome, in the first

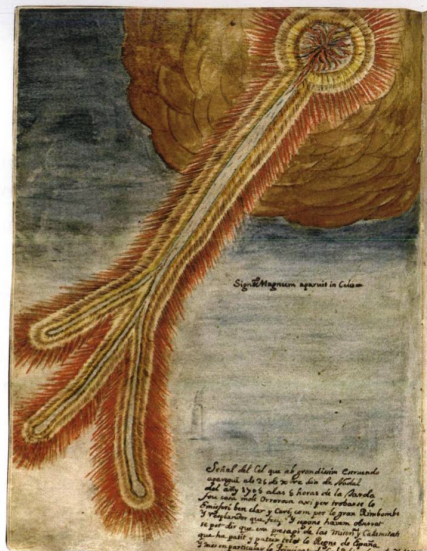
These hand-painted plates from a book of 1587 were created by an anonymous artist in Flanders (now northern France). Known as *The Comet Book*, its full title translates as "Comets and their general and particular meanings, according to Ptolemy, Albumasar, Haly, Aliquind, and other astrologers." The focus is on comets in folklore and superstitions. The next century would see more scientific studies



Left: this watercolor sketch, taken from a sixteenth-century book, depicts the comet of 1532, which was seen for 119 days. The astronomer Edmond Halley later said that this comet could have been related to the similarly bright comet of 1661, noting that the two comets took the same orbit around the sun



Above: this painting from *The Book of Miracles* (c. 1550), a collection of phenomena and portents, depicts a comet seen in Germany in AD 1007 that is described as giving off "fire and flames in every direction." Right: viewed in France and Spain on December 25, 1704, the comet drawn here for Josep Bolló's *Illustrated Scientific Miscellany* (1714) was perceived as a sign in favor of Archduke Charles III of Habsburg in the War of the Spanish Succession



Above: the comet seen in October 1527 in Germany was illustrated in Ambroise Paré's *On Monsters and Marvels*, published in 1573. Paré's woodblock print was

based on renditions by Pierre Boaistuau from 1560, and Conradus Lycosthenes from 1557, and was printed in a colorized version, as seen here, at a later date

century AD, Pliny the Elder described their resemblance to swords or flaming torches in his writings.

In the Middle Ages, comets were objects of fear. In the Bayeux Tapestry, embroidered in the eleventh century, Halley's Comet (the name came much later), which crossed the sky in 1066, passed over the castle where the King of England, Harold, was being crowned. "They were astonished by the star," states the sewn inscription. In 1301, in Italy, the painter Giotto observed the passing of the same comet when decorating a chapel in Padua. In his fresco, it became the shooting star that guided the three Magi to the stable where Jesus was born.

At the beginning of the modern era, the terror and reverence remained. In around 1495, Albrecht Dürer

the orbit of the comet later named after him), put knowledge of comets on a firmer footing, these celestial bodies continued to strike fear. In 1696, the British pastor William Whiston put forward the idea that the flood related in the Bible must have been caused by a comet, giving rise to the idea that, if such a body had caused such a catastrophe in the past, then similar events could occur again. A century and a half later, the artist John Martin recalled this text when painting *The Eve of the Deluge*: above the mountains where Noah's family awaits divine punishment, a comet cleaves the sky as both the harbinger and the instrument of disaster.

The disquiet was sometimes fanned by the scientists themselves. In 1773, for example, the French astronomer Jérôme Lalande maintained that a comet passing too close to our planet would whip up the oceans to a height of a thousand *toises* (or about 6,400 feet), drowning everyone and everything. In January 1910, another Frenchman, Camille Flammarion, prophesied that when Halley's Comet was due to appear in May, its tail might collide with our atmosphere; "The carbon oxide could impregnate the atmosphere and snuff out all life on the planet," he wrote. The press, avid for sensation, echoed his ideas. Then newspaper articles began to discuss compensatory expenditure, chaos, and disorder, and huge population movements in coastal regions caused by the prospect of tsunamis.

Commerce preferred to soothe customers' anxieties by making them laugh instead. The Parisian department store Au Bon Marché published posters showing a comet visiting Paris in the form of a fairy, prettily dressed in pink. The tire manufacturer Michelin also created its own images, showing motorists breathing from cylinders of oxygen that it had put on sale to save them on the fatal day. And the publisher E. Le Deley sold droll postcards showing people fighting to get to the moon either by airship or by cannon (Georges Méliès had made the film *A Trip to the Moon* in 1902).

Historically, the comet of 1910 was the last to provoke significant disquiet. Does that mean our age has put the fear of comets behind it? One could argue, rather, that this fear has shifted. The stories that explain the extinction of the dinosaurs because of a meteorite collision some 66 million years ago are accompanied in books and online by spectacular images of skies with bolides shooting through them, about to impact. These images feed imaginations and unconscious fears, as pastor Whiston's arguments did over three hundred years ago; an asteroid, a comet, crashing down onto our Earth, could bring about its end or, in barely less dramatic fashion, bring on a winter lasting decades or centuries due to the cloak of dust brought down by the collision. That would be one – paradoxical and highly unlikely – way of halting our own changes to the planet. ♦

Translated by Charles Penwarden



The Great Comet of 1577, famously observed by the Danish astronomer Tycho Brahe, is shown in a leaflet of the time that was printed in Augsburg, which described it as "a very frightening miracle sign"

painted the explosion of what we now call a bolide (a very bright meteor) on the back of his *Saint Jerome in the Wilderness* panel painting. In 1514 he represented another comet in his engraving *Melencolia I*, an allegory of the splenetic temperament. At the opposite end of the century, in 1573, the surgeon Ambroise Paré published his book *On Monsters and Marvels* with an engraving that shows a comet described as "so horrible and frightening," of "an excessive length," observed in Germany in 1527. As the image shows, "At the summit of this [comet] one could see the shape of a curved arm holding a large sword in its hand" and, to the sides of the sword, "a great number of hatchets, knives, swords, colored with blood, among which there was a great number of hideous human faces, with their beards and hair bristling."

While scientists of the seventeenth and eighteenth centuries, and especially Edmond Halley (who calculated

FOR THE RECORD

STORY

Hervé Genoud

The greatest attention to detail, thoroughness of process, and respect for tradition are long-standing characteristics of Patek Philippe's timepiece making. What is perhaps less well-known is that this approach has also been used to create a unique treasure trove of horological information in the company's archive

In Tchaikovsky's ballet *The Nutcracker*, when night falls the toys wake up and claim center stage. If Patek Philippe's archive was to come to life on the stroke of midnight, we would see, surging around Antoine Norbert de Patek and Jean Adrien Philippe, all those generations of watchmakers and artisans that have exercised their skills in the manufacture's workshops and all the many generations of customers who have carefully passed down this heritage to their descendants. Especially, though, we would hear the resounding ticktock of all the timepieces built since 1839, because at Patek Philippe, as its directors like to say, the watch is the star, and every timepiece made during the course of the past 183 years is recorded individually by its serial number. "What is fascinating about this," says Elia Cottier, who has been in charge of the archive since 2018, "is that we can trace all the watches that the manufacture has made. Over the years, the identification system has evolved and been finely tuned, but it remains perfectly coherent. This continuity and long-term vision is unique."

From the time of its founding in 1839, Patek Philippe has kept archive books that are known as the *Livres d'Établissement*. This was common practice back when production

was organized according to the system known in Switzerland as *établissage*, whereby various parts of the process were outsourced to independent workers. Back then, the watches were identified by their movement number. When a movement went into production, each *ébauche*, or movement blank, was given a unique number. The registers then tracked, for each and every watch, the successive steps in the production process with the relevant costs, as well as all the useful information about the watch's exterior

THE GREAT LIVRES D'ÉTABLISSEMENT CAN GIVE ONE THE IMPRESSION OF OLD TOMES OF MAGIC SPELLS

features (case, dial, etc.). Also recorded in the books was the name of the buyer, usually a retailer such as Tiffany & Co. in New York or Gondolo & Labouriau in Brazil.

In the 1890s, this management system was modified somewhat, prompted by the drive to become more industrialized. Since the watchcases usually arrived in batches (mostly in multiples or submultiples of six), they, too, were given serial numbers. Each

watch now had two identification numbers: that of the movement and that of the case. To clarify this, the *Livres d'Établissement* were joined by correspondence books in which the case numbers were noted in sequence alongside the corresponding movement numbers.

A photograph (see opposite) from 1906, taken in the historic headquarters on the rue du Rhône that now house the Patek Philippe Salons, perfectly illustrates the introduction of this dual-entry identification system. We are in the room that was known at the time as the *comptoir*, where the watches were finally checked and prepared for shipping. On the left, in the light from the large windows, sit two inspectors, charged with appraising the different operations of watches. Behind them is the head of the department, standing beside a huge cabinet containing the thousands of

watches currently in production, six to a drawer. In the center of the room is the substantial reading desk with its large, open *Livres d'Établissement*, its stack of smaller correspondence books, and two employees concerned solely with filling in these precious registers – proof of how important the records were to the manufacture.

Since then, the system has continued to evolve. The year 1907 or thereabouts saw



the addition of a case book, improving the tracking of batch orders of timepiece cases. The introduction of a reference number for each model, in the early 1930s, and of systematic naming of the movements simplified the recording process by removing the need for detailed descriptions. In the 1980s, printed adhesive notations replaced the handwritten entries. Computerized management brought further changes. But Patek Philippe has remained true to its dual numbering of movement and case, and Philippe and Thierry Stern still insist on there always being a printed, physical version of the archive books, even though they are now usually consulted on a computer screen.

This wealth of information about the watches Patek Philippe has made is far from being a dormant treasure. The great *Livres d'Établissement*, with their beautiful script, their abbreviations, their (often mysterious) symbols, and the occasional tiny sketch,

can give one the impression of leafing through old tomes of magic spells. But they remain an essential, frequently used, and inspiring source of reference material for the manufacture. "I make new discoveries every day," says Elia Cottier.

To guarantee the after-sales service, maintenance, and repair of all timepieces made since 1839 (a commitment confirmed in the regulations of the Patek Philippe Seal), the International Customer Service center must possess not only a considerable stock of parts and high-level expertise but also complete, reliable information, such as that contained in the archive registers. The customer service specialists are therefore in daily contact with the archivist to authenticate the watches entrusted to them, to track down any modifications that have been made, and to verify details of construction or material. The Patek Philippe Museum in Geneva may also call on the archive to

Back in 1906, meticulous records for every Patek Philippe timepiece were kept throughout the watchmaking process, as can be seen here at the manufacture on the rue du Rhône in Geneva. This is the room in which timepieces had their final, detailed checks, and then

were prepared for shipping. Two clerks are seen writing in the archive registers at a great desk that holds the record books. With their facts and figures annotated in detail, and by hand in those days, the books are now a mine of information and are still very much in use today

give or clarify information concerning the approximately 1,150 timepieces that make up its Patek Philippe collection. Indeed, the manufacture's own creative department also finds the archive a source of inspiration, and owners of Patek Philippe watches produced or sold more than 10 years ago may request an "extract" from the archive, detailing the information preserved in the books. Far from being a mere relic from the past, the Patek Philippe archive is very much alive...by day and by night. ♦

Translated by Barbara Caffin

STORY Michelle Orange
PHOTOGRAPHS Joel Stans

DIMINUTIVE LITERARY DELIGHTS

From dollhouses to train sets and the world of Lego, there is an appeal of miniaturization that the child in us all enjoys. But the small world is not only for toys – making beautiful things as tiny as they can be is a challenge for the greatest craftspeople and artists, and not least for printers and bookbinders as well as watchmakers and horological artisans

With its high ceiling, checkerboard floor, and walls lined in dark wood shelving, the long and narrow reading room at the heart of the Grolier Club in New York captures in hushed miniature the grandeur of the larger, more famous libraries after which it was modeled. It is part of America's oldest bibliophile society, which was conceived as part private members club, part nonprofit cultural institution, and was named after the sixteenth-century French collector and bookbinder Jean Grolier de Servières.

In January 1884, a New York printing-press manufacturer and book collector called Robert Hoe invited eight other men, book-lovers of differing backgrounds, to his home

to discuss bookbinding, typography, and printing. These art forms, all those present agreed, needed preservation and reform. From what can be imagined as the clamor of that evening, their mandate emerged, according to the club's constitution, "to foster the study, collecting, and appreciation of books and works on paper, their art, history, production, and commerce."

As its collection had grown from a few hundred books to several thousand by the end of the nineteenth century, the Grolier Club required a larger space. The home of the Grolier since 1917 is located on a quiet block of Manhattan's Upper East Side, on East 60th Street, and was designed



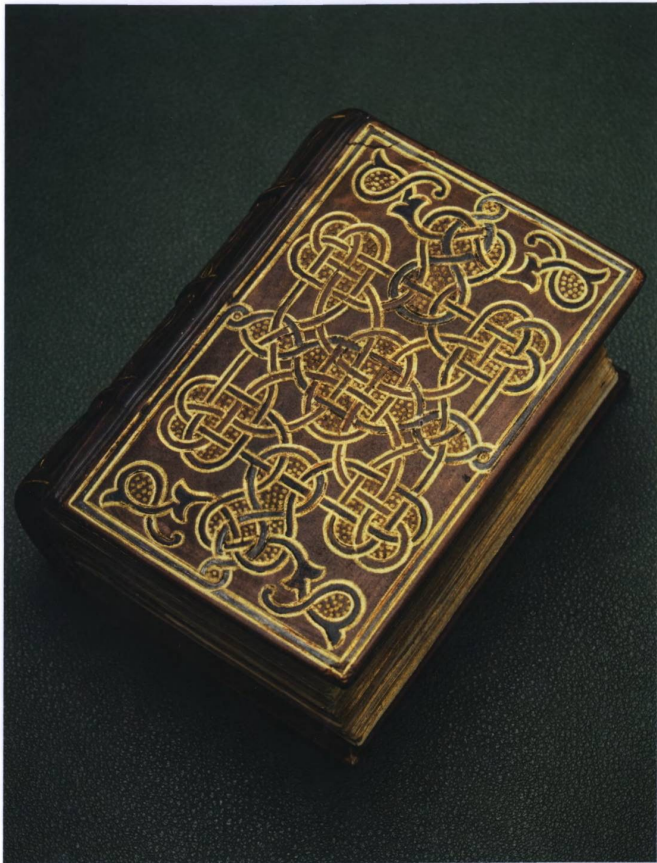


CHRIST
WELTITZ

LES DON'S
DE L'AMOUR
DE L'AMITIE
C'est le plus
beau don
que l'on puisse faire
à son prochain
pour le plus
de sa gloire
et de son salut
par le Sr. J. B. de
la Motte
Paris chez la Citoyenne
de la Harpe

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THE COLLECTION IS A TESTAMENT TO A LONG AND CURIOUS TRADITION: THAT OF EXQUISITE BUT FUNCTIONAL MINIBOOKS

by Bertram Grosvenor Goodhue, an architect and typographer. The interior spaces feature molded, pedimented walnut bookcases and floors of black-and-white tiles, inspired by elements of the libraries at the University of Cambridge's Queens' College and Trinity College. Today the club's collection of around one hundred thousand books includes rare volumes on the history of bookbinding and book design as well as exemplars of the form dating back to the medieval era, many of them having been donated by the collectors who have historically made up a significant number of the club's membership.

One of those collections is that of more than 350 miniature books, most of which were donated in 1911 by Samuel Putnam Avery Jr., the son of a founding Grolier Club member, Samuel Putnam Avery. Largely comprising bindings from the eighteenth century through the early twentieth, the collection also includes some volumes

from earlier periods and those that date to the present day. Mainly European in its origin, the collection is a testament to a long and curious tradition: that of making exquisite but functional miniature books, which through the ages have been considered status symbols for the elite, signifying literacy and piety; practical adjuncts for the devout; fashion statements

Page 65: seen with a variety of books, including *Good Sayings of Good Men* from 1848 (which has a saying for every day of the year), a miniature nipping press holds two books. Such a press would be used to work on a book's binding design or to trim the pages. Opposite: these late eighteenth-century French miniature books feature silk embroidery with spangles, gold thread, and gilt edges. The one on the right, a calendar, has a quilted cover

and hand-painted petals. To the left of that, the cover has a portrait miniature of a young woman with feathers in her hair. Above: this edition of the Catholic *Little Office of the Virgin Mary* was printed by Nicolas Jenson in Venice in 1475. It has 192 vellum leaves, with red and black text and illuminations on title pages and initials. The calf-leather binding was made in the 1800s by Louis Hague and has French Renaissance-style gilt strapwork

for the image-conscious everyday woman; and many other things besides.

The Avery collection contains a cross section of both the style and content of miniature books that has prevailed across the centuries. Prominent in this is the *Book of Hours*, a form of Christian prayer book that was especially popular through the Middle Ages; classics in Greek and Latin including those by Homer and Aeschylus; children's books; and almanacs of varying specialty. Although only about a dozen incunabula (texts from the earliest period of typography, 1450s–1501) have survived in miniature form, with the age of the printing press minibooks became a phenomenon across Europe. Because making the bindings required such meticulous skill, early printing apprentices often honed their craft by working at this tiny scale. Renaissance portraits of devout ladies and important, religious men regularly featured their subjects reading



or holding a miniature book, most often a book of hours or Psalter, in the palm of one hand. By the time of her 1536 execution, these diminutive works were common yet exclusive enough that Henry VIII's queen Anne Boleyn carried one (a book of psalms) with her to the swordsman's block.

As literacy became a sign of status during the sixteenth century, thinner paper and a growing market created a minibook boom, and the purview expanded to classic epics translated into other languages. Covers previously made of wood were replaced by a lighter pasteboard; a new, interlaced binding style appeared; and techniques such as *gauffering* – the stamping of the bound, usually gilded edges of a book with a small, indented pattern – emerged. Printers also began producing luxury minibindings, such as those made from tortoiseshell and that

Above, left: this miniature calendar for the year 1792 was made in France, with the days of each month listed lengthwise on a double-page spread (bottom). Its binding is made of mother-of-pearl that was carved, gilded, and painted (top). It has a silver-gilt hinged back and

gilt edges, as well as silver inlays and hand-painted rosettes. Above, right: the eighteenth-century case of this seventeenth-century German book is silver-gilt over silver with a delicate pierced and chased floral arabesque pattern adorning both the covers and the two hinged clasps

of Queen Elizabeth I's "gold book," a 1540 devotional volume on display at the British Museum. Measuring just 2.5 inches by 2.2 inches, it has gold enamel and intricate engraved biblical scenes on the front and back cover. The Grolier Club's collection includes a descendant of this turn toward the opulent: an eighteenth-century miniature German binding in silver-gilt on silver (see above) that was no doubt the pride of an upper-class, upstanding churchgoer.

From the seventeenth through the eighteenth century, embroidered bindings gave a gendered bent to the minibook phenomenon. Women of taste and aspiration across Europe might be seen carrying miniature books bound in silk, satin, velvet, or linen and embroidered with Far East-derived sequins, seed pearls, gemstones, and gold leaf and thread. Enameled, cameo portrait-style inlays were popular, as was the presence of a compact mirror on the inside cover. Particularly fine bindings might be kept in a family for generations, with the text replaced or updated, in the case of almanacs, as the owners saw fit.

Women especially, who were skilled in embroidery, might make their own minibook bindings. The women of Little Gidding, Huntingdonshire, UK, an Anglican church community that was founded by the minister

Nicholas Ferrar and his sprawling extended family in 1626, achieved renown for their skilfully embroidered offerings after the daughter of a bookbinder from Cambridge was hired to teach the craft to the entire, ultrareligious Little Gidding clan. Having gained popularity, the style also became a money-making staple at large-scale printers.

Today, differing standard sizes exist for what makes a miniature book: in the USA, a miniature book must measure no more than 3 inches in height, width, or thickness; in other parts of the world, though, books that measure up to 4 inches still qualify. Of course, the tiniest offerings have a particular

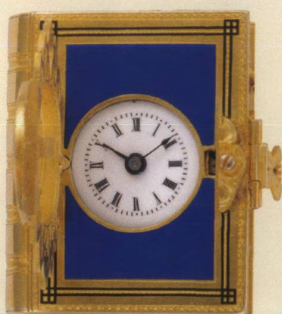
appeal; miniature binding tools (like the one pictured on page 65) were produced to press microminiatures, which are defined as measuring less than 1 inch in height, while ultramicrominiatures measure less than a quarter of an inch.

The early nineteenth century can be said to be a “golden age” for minibooks as mass production made them widely available. Poetry and fiction became staples of the form: Pickering Diamond Classics produced a set of books – including volumes by Dante, Milton, and Homer – bound in red Morocco leather. (The Grolier Club collection contains several of these volumes; a full set sold at

an auction in 2021 for US\$8,125.) In the USA, in 1865, as many as one million minibook volumes of the Emancipation Proclamation were given to Union soldiers fighting in the Civil War, to carry and distribute.

With a heritage that is as robust as its dimensions are modest, the miniature book is a rarity among bibliophilic rarities. In its breadth and variety, the Grolier Club’s miniatures collection captures a tradition of aesthetic innovation and workmanship that has shifted and evolved across centuries that span the dawn of mass literacy and that of book production as an art form nurtured by the elite but available to all. ♦

WITH A HERITAGE THAT IS AS ROBUST AS ITS DIMENSIONS ARE MODEST, THE MINIATURE BOOK IS A RARITY AMONG BIBLIOPHILIC RARITIES



Not all miniature books are quite what they seem! In the late nineteenth century, Patek Philippe made dainty pendant “Fantaisie” watches that resembled books on chains – open the book’s cover, and you find not pages but a tiny watch. Two of these are now in the company’s museum in Geneva: with an allegory of Drawing painted on enamel, Movement No. 27 461 from 1869 (top left) is

only 27.6 mm x 23.5 mm x 12 mm (Inv. No. P-1190); and from 1870, Movement No. 47 018 with an allegory of Music painted on enamel (top right), is 27.4 mm x 24.2 mm x 12.4 mm (Inv. No. P-1145). Also in the Patek Philippe Museum, a breviary from Augsburg (left), Inv. No. E-82, c. 1670, has miniature painting-on-enamel versions of Titian’s *The Holy Conversation* and *Adoration of the Shepherds* on the front and back covers

AUCTIONS

This season some truly beautiful and rare Patek Philippe timepieces were seen in auctions around the world, including exemplars of rare handcraft techniques. Simon de Burton selects some of the most interesting and explains why they caught the eye of admirers of the marque



US\$3,115,000
HK\$24,450,000

The catalog entry for the sale of this 2009 rose gold example says the REF. 5002 Sky Moon Tourbillon is “one of the most important watches in modern history.” The most complicated Patek Philippe wristwatch available during its production run (2001–2012), it has no fewer than a dozen functions displayed (for the first time on a Patek Philippe wristwatch) on double dials. One side shows regular hours, minutes, and seconds (mean solar time), moon age, and the retrograde perpetual calendar; the other offers a sky chart with sidereal time display, the phases of the moon, the angular motion of the celestial bodies, and the meridian passages of Sirius and the moon. The 42.8 mm watch also has a minute-repeating mechanism and tourbillon. Sold at Christie’s, Hong Kong, May 24, 2022



US\$224,700
HK\$1,764,000

Anita Porchet is a master of the cloisonné enameled watch dial, as is attested by the exquisite depiction of a peacock butterfly she created for this unique 38 mm platinum-cased REF. 5077P “Papillon” Calatrava from 2009. The making of such a dial requires multiple applications of enamel and kiln firing at temperatures exceeding 1,400°F – a difficult and risky process. Such watches are, therefore, very rare. This piece bears Ms. Porchet’s full signature, indicating the work is entirely hers. (Those made with her atelier are signed “A.P.”) Sold at Phillips, Hong Kong, May 27, 2022



US\$315,000
CHF315,700

The REF. 1463 was Patek Philippe’s first water-resistant chronograph and, with its substantial 34.5 mm diameter case, was intended for the active sportsperson. Fewer than 650 were made, between 1940 and the late 1960s, and only a quarter of those had stainless steel cases like this model. This 1949 example also has a rare silver dial and is one of only 20 to have a full set of Breguet numerals (rather than a combination of numerals and batons). The tachymetric scale is in miles rather than kilometers, probably for the US market. Sold at Sotheby’s, New York, June 15, 2022



US\$1,008,000
CHF985,300

This 1981 white gold 37.5 mm REF. 3448 perpetual calendar moon-phase watch was one of the first Patek Philippe wristwatches made that included a leap-year indicator. It is one of only two known to have been sold. A distinctive red dot appearing in a dial aperture indicates when it is a leap year. The enamel dot and satin-silvered dial are in excellent condition in this example, as is the white gold case that came with an additional mid-case to enable the watch to be worn on an integrated chain bracelet or a leather strap. Sold at Christie's, New York, June 9, 2022



US\$947,400
CHF937,000

This remarkable 47.5 mm yellow gold REF. 715/3 pocket watch, decorated with a miniature replica of *Young Woman with a Water Pitcher* by the Dutch seventeenth-century master Johannes Vermeer, was first sold in 1971 and then, after being acquired at "The Art of Patek Philippe" auction in 1989, remained with that owner for 33 years. The miniature painting on enamel was created by the master artisan Suzanne Rohr, who worked for Patek Philippe from 1967. Sold at Antiquorum, Geneva, May 7, 2022



US\$2,044,800
HK\$16,050,000

It was in the 1930s that the watchmaker Louis Cottier invented the heure universelle mechanism that enabled the correct hours in 24 different time zones to be displayed simultaneously. Patek Philippe was one of the first to adopt the system, and the REF. 605 HU pocket watches into which it was fitted are now among the most collectible timepieces – especially when they have cloisonné enamel maps on their dials. Only a dozen examples of the 44.5 mm REF. 605 with such dials are known, including this 1948 yellow gold world map piece. Sold at Christie's, Hong Kong, May 24, 2022



US\$1,375,000
CHF1,360,000

Some great figures in history have chosen to wear watches by Patek Philippe, not because the timepieces served as status symbols but to reflect their own uncompromising approach to everything they do. One such individual was the late Simon Wiesenthal, who owned this exquisitely simple time-only 35 mm stainless steel-cased REF. 1503 from new (in 1942) until his death in 2005. It is one of only two known versions of the model that have the combination of a black lacquered dial and Breguet numerals. Sold at Phillips, Geneva, May 8, 2022



US\$662,500
CHF655,200

It was a milestone for Patek Philippe when the REF. 3448 launched 60 years ago. For the first time, the company had combined automatic winding with the perpetual calendar complication for which it was already renowned. And so apt was the REF. 3448 that it remained in production until the 1980s. This 37.5 mm example of 1975 is one of only two known to combine a white gold case with luminous hands and hour dots. The addition of the dots moves the baton markers slightly closer to the center of the dial than on regular models. Sold at Phillips, Geneva, May 8, 2022

For clear readability, the REF. 1436's chronograph display – the counterweighted chronograph and split-seconds hands, as well as the 30-minute counter hand (at three o'clock) – are in blue-steel to contrast with the yellow gold time indications (the *feuille* hour and minute hands and the small seconds hand in the sub-dial at nine o'clock)

The regular production cases for the REF. 1436 were made in yellow gold (as illustrated here), rose gold, or stainless steel. The 33.2 mm diameter gold cases of our example's era were made for Patek Philippe by Emile Vichet, as indicated by the Master Key mark with a "9" inside



The REF. 1436 dials were typically made by Stern Frères, silvered with applied gold hour markers. This example has an applied Arabic "12" and "6," with baton indexes for the remaining hours. Others had Roman indexes or batons

The round coaxial split-seconds pusher housed in the crown has two functions: to stop the split-seconds hand in order to measure an intermediate time and, by actuating it again, to catch up with the chronograph hand. This feature is found on all later REF. 1436 models

This particular REF. 1436 features a 1,000-meter tachymetric scale, but the model was also available with a miles-based scale, depending on the market's preference

COLLECTOR'S GUIDE

REF. 1436

STORY John Reardon ILLUSTRATION Nabil Nezzar

Born bearing close resemblance to its older sibling chronograph wristwatch, the REF. 130 that was released in 1936, the REF. 1436 has a noble lineage. Itself launched in 1938, the REF. 1436 was Patek Philippe's first series production split-seconds chronograph wristwatch, and it remained in the collection until 1971, becoming a much-coveted timepiece for collectors worldwide. The watch embodied competition and was a prized possession of sportsmen past, for whom winning or losing came down to, literally, a split second.

The split-seconds, or *rattrapante*, chronograph complication allows the user to measure two timed events simultaneously, such as two racing horses or cars, and to stop one timer without affecting the other. A lap

can be clocked while also timing the full race. This very useful function is one of the most challenging complications for the watchmaker to produce. Patek Philippe considers a split-seconds chronograph as complex to achieve as a minute repeater.

The model illustrated above was originally sold by the Henri Stern Watch Agency in New York. Its movement (No. 868 882) is the caliber 13-130, made from a Valjoux *ébauche* and finished to Patek Philippe's high standards. The caliber is a fine example of mid-century watchmaking technology and hand-finishing techniques. This particular REF. 1436, now held in the Patek Philippe Museum (Inv. No. P-832), dates from 1959. It has a satin-finished silver dial and leaf,

or *feuille*, hands; other models have straight baton hands. The rectangular pushers at two and four o'clock start and stop the chronograph and reset it to zero, and there is an integrated split-seconds button on the crown.

Today, we can still see the ancestral line in modern Patek Philippe split-seconds chronographs. For example, the REF. 5370P's dial layout and tachymeter are clearly influenced by the aesthetic of the REF. 1436. Even the new model's caliber CHR 29-535 PS draws on the caliber 13-130 in testament to Patek Philippe's respect for its watchmaking traditions. With only around 140 pieces of the historically significant REF. 1436 ever made, it remains one of the most desired vintage Patek Philippe complicated wristwatches. ♦



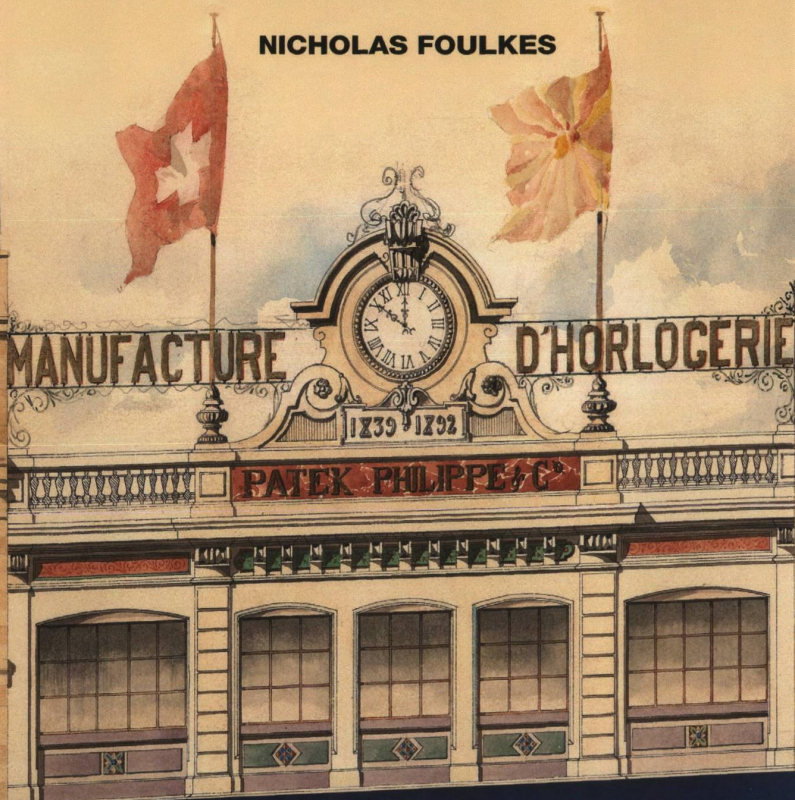
PATEK PHILIPPE
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THE AUTHORIZED BIOGRAPHY

NICHOLAS FOULKES



Patek Philippe is pleased to announce the release of the reprinted *Patek Philippe: The Authorized Biography* by Nicholas Foulkes

From its founders' modest beginnings to the creation of the world's most prestigious watchmaker, the story behind Patek Philippe is as captivating as its timepieces and highlights not only the marque's historical significance but also its contribution to the future of horology. Featuring an enriched final chapter and available for the first time in Spanish, the publication is a welcome addition to any collector's library shelves. Purchase your copy in English, French, Spanish, Italian, German, Simplified Chinese, or Japanese at patek.com/library



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