

F.P.JOURNE  
Invenit et Fecit

  
THE HOUR GLASS

# Young Talent Competition

Awarding to the winner  
at the F.P.Journe Manufacture

April 1, 2025

Since 2015, the Young Talent Competition allows discovering the next generation of most talented young watchmakers in the world, supports them in their route to independence by identifying their achievements and putting them under the spotlight. F.P.Journe organizes the Young Talent Competition with the support of The Hour Glass, luxury watch retailer in the Asia Pacific region. Both Maisons aim to perpetuate and support the art of haute horology and cultivate the appreciation of extensive horological craftsmanship.

The selection criteria are based on technical achievement, the search for complexity in their realization, the quality of craftsmanship as well as their sense of design and aesthetics. Applicants must have independently designed and created a timepiece or an horological construction. The 2025 Young Talent Competition winner receives a diploma and a CHF 50,000.- grant from The Hour Glass and F.P.Journe, which will allow him to purchase watchmaking tools or finance an horological project.

The jury of the Young Talent Competition 2025 is composed of key personalities from the international horological scene: Philippe Dufour, Andreas Strehler, Giulio Papi, Marc Jenni, Michael Tay, Elizabeth Doerr and François-Paul Journe.

# Alexis Fruhauff

## Pendule à Seconde

29 years old - Paris - France  
Graduate of Lycée Diderot, Paris, France - June 2022

### Introduction\_

This project was born in 2022 during my final year of DNMADe (National Diploma of Arts and Design Crafts) at the Paris watchmaking school, where I discovered high-quality masterworks made by students in the late 19<sup>th</sup> century. After graduating, I refined and enhanced the project by incorporating inspiration from the work of French watchmaker Antide Janvier, whose atypical and distinctive creations I particularly admire.

### Design and crafting\_

The *Pendule à Seconde* was conceived from a blank page: no component was reused from a previous project, and even the tools themselves were entirely designed and manufactured to create the various parts. The work extended over a three-year period, in parallel with my training. The regulator was built in a traditional way, mixing modern and classical techniques: hand-filing, turning on a Schaublin 102 and an 8 mm watchmaker’s lathe, milling on an Aciera F3, and machining on a Hauser 2BA jig borer. All components are removable, making maintenance, transmission, or future decoration easier.

### Horological architecture\_

The movement, suspended on a bracket, operates with a pivoted detent escapement with lost beat, inspired by the work of French watchmaker Paul Garnier, combining teeth and pins. Only the right pallet delivers the impulse; an opposing pallet ensures safety. The pins are machined from a modern alloy, Hardiall®, which is self-lubricating, lightweight, and highly wear-resistant. The pendulum, mounted on an Invar stem, is removable. It features a system of screw-in lenses and a fine-pitch dead point adjustment, allowing for extremely precise regulation.

Power is supplied by two symmetrical barrels with Maltese Cross stopworks, echoing the philosophy of Breguet’s marine chronometers, avoiding the fusee-and-chain mechanism and delivering constant force required for a detent escapement. Each barrel includes a screwed cover with isostatic repositioning, an external hook, and hardened steel shafts, ensuring perfect concentricity and controlled wear.

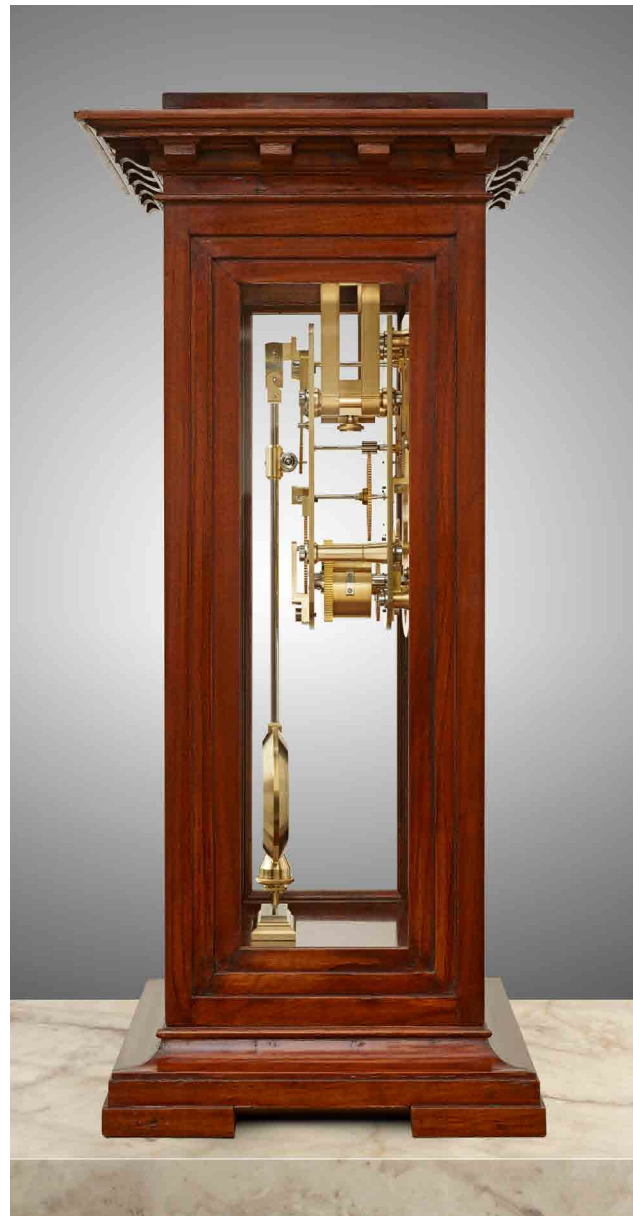
The gear train was entirely hand-crafted. The pinions are cut, hardened, blued, polished with boxwood, then turned “between centers” to guarantee concentricity. Lateral oil sinks and choked conical pivots help retain oil. The wheels, screwed to the arbors, are oversized like in school calibres, enabling future repairs or decorative finishes. The ratchets and clicks were slightly redesigned for greater comfort during unwinding, while preserving the “school” spirit. Their surfaces are softened and undersides hollowed out to prevent plate abrasion.

### Case and dial\_

Two options were explored for the case: one in gilded bronze, and one in solid cherrywood, which was ultimately chosen. Inspired by the clock cases crafted by cabinetmaker Jean-Ferdinand Schwerdfeger for Antide Janvier, it was designed after graduation with the help of Stéphane Girardot – a Parisian antiques dealer specialised in historic horology – to respect the proper proportions of late 18<sup>th</sup>-century French clockmaking. The entire case can be disassembled into three parts (base, frame, hood) and includes a secret door. The hand-engraved silvered brass dial is mounted via an invisible fixing system - a genuine technical challenge. It is accompanied by a hand-engraved amplitude measurement plate for the pendulum allowing for a precise visualisation of its operation.

### Technical specifications\_

**Dimensions:** 55×32×23 cm / **Weight:** approx. 7 kg / **Escapement:** pivoted detent with lost beat, steel and Hardiall® pallets / **Pendulum:** Invar stem, screw-in lenses, fine metric thread adjustment / **Barrels:** double barrels with Maltese Cross, screwed covers, hardened steel shafts / **Pinions:** boxwood polishing, blued, hand-cut and finished / **Wheels:** oversized thickness, screwed / **Ratchets and clicks:** redesigned, hollowed, hand-machined / **Case:** solid cherrywood, dismountable, secret door / **Dial:** hand-engraved silvered brass, invisible mounting / **Finishing:** traditional hand-finishing, Schaublin 102, Aciera F3, Hauser 2BA.







## Interview

### Alexis Fruhauff

#### About you:

##### What led you to pursue this path?

At the end of middle school, I already had an interest in watchmaking and was intrigued by small-scale mechanics. My father worked on aircraft engines, and I found it amusing that he and I could both work on mechanical systems but at completely opposite scales. Since my teachers discouraged me from taking a CAP (Vocational Aptitude Certificate), I turned to general education. After earning a literary baccalaureate and spending a few months at university, I eventually returned to my desire to create with my hands, and I enrolled in watchmaking school without a particular passion at first, but it quickly developed. At the end of my CAP, I knew I wanted to become a creator, so I went on to an BMA (Artistic Trade Certificate), followed by a DNMADe (National Diploma in Arts and Design Crafts).

##### How has your approach to watchmaking evolved since your first studies?

In the beginning, I was interested in watchmaking as a whole, with a preference for complicated watches. But I quickly gravitated toward the world of independent watchmakers. The real turning point came when I discovered Luc Monnet's work on Instagram, which inspired me to explore conventional machining and prototyping. Today, I'm especially passionate about historical and scientific horology, for the discipline of its construction and the finesse of its execution.

##### Faced with the challenges of creating a complex piece like the *Pendule à seconde* over several years, how did you stay motivated?

I had a deep desire to create something true to my values. My personality helps, as I like seeing things through. Despite the difficulties and failures, each success, each well-finished component made me want to continue. Everything was part of the learning process. Reworking gear train bridges several months apart allowed me to see the progress I had made. And after machining every component, I just wanted to assemble it and hear the first tick-tock.

##### How does your passion for historical horology, especially the work of Antide Janvier, influence your current work?

I believe it is important to aim for the quality of historical horology. At the Musée des Arts et Métiers in Paris, I was immediately fascinated by his work. *Antide Janvier, Celestial Clockmaker* by Michel Hayard quickly became my bedside book. Discovering the perfection of his pieces leaves no one indifferent, and I hope to one day come close to this level of craftsmanship. He placed great importance on the work of his subcontractors. I had the opportunity to collaborate with cabinetmaker Lorcan Ménard for the wooden case and engraver Louis Leforestier for the decorations, in the same spirit as Janvier, who worked with cabinetmaker Schwerdfeger and dial enameller Joseph Coteau.

##### What were your most valuable learning experiences at Lycée Diderot?

Working at the Sainte-Trinité Church in Paris, doing surveys in connection with the reconstruction of the Notre-Dame clock. This project was led by the Horloge Notre-Dame association, under the direction of Ryma Hatahet, a heritage restorer, who also trained us in conservation principles. From a more technical perspective, I also machined a complex five-axis part for the clock, which was a great challenge.

##### You currently work as an independent in Jean-Baptiste Viot's workshop. What has this environment and proximity to an experienced watchmaker brought you?

It has been a real opportunity. The time spent on the clock didn't allow me to earn an income, and Jean-Baptiste opened the doors of his Paris workshop to me. He gave me a set of keys and access to the machines, something I would not have been able to finance on my own. He first welcomed me during an internship, then trained me in the restoration of antique clocks, which allowed me to make a living and fund my project. In a way, he reproduced what Philippe Prutner once did for him. Later, I will probably do the same for a young watchmaker. It also gave me access to an immense library and beautiful antique pieces. I really wanted to make him proud with this clock.

**About the clock:**

**Which part of the fabrication process did you enjoy most?**

The dial-work. It was particularly delicate, because there was no room for error, especially with the hand engraving. The slightest flaw would have been immediately visible. From re-cutting on the pointing machine to touch-ups with a file, everything had to be flawless. The plate beneath the dial, with its polished inner angles, added even more complexity.

**Crafting a regulator over several years using such varied techniques requires discipline and patience. Which step did you find the most demanding?**

Making the pinions. These are components that tend to be underestimated, but they say a lot about the level of care given to the entire piece. I combined several techniques: roughing on a Schaublin 102, cutting on an Aciera F3 mill, heat treatment, turning between centers, finishing with a handheld graver, polishing. A single mistake can cost hours of work. It's an exercise in patience and rigour.

**If you were to create a follow-up to the *Pendule à seconde*, what features would you like to explore or add?**

This clock is designed as a foundation, a motor for future projects. I would like to integrate astronomical indications and work further on the balance, with a temperature-compensated system. I would also like to create versions with enamel dials, in the spirit of Coteau or Dubuisson. The idea would be to continue blending strong aesthetics with technical excellence.

**The choice of an 18<sup>th</sup> century-inspired wooden case gives a strong identity to your piece. How does this link to the past fuel your contemporary approach?**

Before moving toward contemporary work, you have to understand what has been done before. The cases made by Antide Janvier are of incredible quality, with very technical joinery. All the modillions, for example, are individually screwed. I had the chance to speak with Stéphane Girardot, a Parisian antiques dealer who knows these pieces well and shared some technical insights with me. For me, it's both a tribute and a way to prepare myself to design a case that belongs to the present.

**About the future:**

**Why did you participate in the Young Talent Competition?**

It's a competition I had always dreamed of entering. I began my studies in 2016, one year after the first winners. Each year, I discovered the new creations. At school, we talked about it a lot, and that's what inspired me to apply. The competition encourages creativity and self-improvement, and the support of F.P.Journe and The Hour Glass is a real opportunity.

**As an independent watchmaker, what skills or knowledge would you still like to acquire for your future creations?**

To keep learning, again and again.

**What kinds of pieces would you dream of designing in the coming years?**

I want to continue working on clocks, especially longcase regulators. This format offers great freedom of construction, since the size of the components allows one to appreciate the details with the naked eye. It's a convivial kind of horology, something to be shared. I don't rule out creating wristwatches someday, but never at the expense of clockmaking.

**How do you envision the future?**

I would like to combine traditional techniques with modern tools to create the most beautiful contemporary clocks, in a Parisian workshop.

**What personal challenges have you set for yourself in the coming years?**

To restore collectors' appreciation for clocks.

**And one piece of advice for a young watchmaker?**

Develop your horological culture to prepare your project and identify every place where a problem may already have been solved by those who came before us. And second, always see things through, no matter how long it takes.

**[www.fpjourne.com](http://www.fpjourne.com)**

**The independent F.P. Journe Manufacture** produces around 1,000 precision mechanical watches per year with 18K rose Gold movements, the brand's exclusive signature. The label "Invenit et Fecit" engraved on all its watches, guarantees and highlights the importance of an in-house calibre entirely designed and constructed in its workshops.

F.P.Journe organizes the Young Talent Competition and brings more than 40 years of expertise in authentic haute horology. François-Paul Journe's historical knowledge has led him to show a timeless consistency in his research on precision and innovative prowess. It is a real honor for him to encourage these young talents by sharing his knowledge, his passion and his determination on a daily basis. He supports them as he was supported at their age.

**[www.thehourglass.com](http://www.thehourglass.com)**

The mission of **The Hour Glass** is to advance watch culture. They are known for their thoughtfully curated selection of brands, their passion in designing uniquely immersive retail experiences and their team of highly knowledgeable watch specialists. The Hour Glass strives to become the primary port of call for all enthusiasts and watch collectors alike. Everyday across their combined network of over 50 boutiques in the Asia Pacific region, they are poised to further the awareness and appreciation of watches and ready to guide their clients in their hunt for a superlative timepiece.

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