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### Fleurier todav



The Calibre 5300, a mechanical movement by Vaucher Manufacture All rights reserved - Vaucher Manufacture

Fleurier's heart beats in time with the clock. How did this rural hamlet become a centre for time keeping? In between periods of prosperity and devastating economic crises, discover a history of passionate craftsmen whose expertise has been internationally renowned for more than two centuries. Follow the green walkways to discover structures symbolic of their time and immerse yourself in their magic.

### The village with two Nobel Prizes

Visiting Fleurier means meeting two famous researchers who have contributed to its renown. Charles-Edouard Guillaume, who won the Nobel Prize for physics in 1920, and Daniel Bovet, who received one for medicine in 1957



Watchmakers at work All rights reserved - Vaucher Manufacture

Following the economic crisis of the seventies, the Fleurier watchmaking business has seen an impressive revival, targetting the top of the range segment. Following on from Parmigiani Fleurier, founded in 1975, companies in the area occupy a prime position in this small yet lucrative market. Several luxury watchmakers are established in Fleurier and the surrounding area, in particular Bovet, Chopard Manufacture and Voutilainen Piaget, founded at La Côte-aux-Fées in 1874, has opened a new production site at Buttes under the name of Valfleurier. This company joins other firms that specialise in outsourcing such as Vaucher Manufacture, Fleurier Ebauches or Waeber HMS. This success is the fruit of outstanding expertise and the prestigious watchmaking tradition that has been cultivated in Val-de-Travers from generation to generation...

### Fleurier Ouality

To crown the revival of the area's watchmaking activities, a Fleurier Quality label was created in 2001 at the instigation of the brands active within the region and the local authorities. This certification stipulates extremely exacting quality criteria. The rare products that meet the requirements are then able to enjoy the renown of a tradition synonymous with excellence.

# 40,000 years ago...

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Map of Fleurier in 1790 by J.-J. Berthoud

The first traces confirming human presence in the Val-de-Travers region date back some 40.000 years. There has been permanent inhabitation probably since Gallo-Roman times, but the first archaeological relics date back to the V<sup>th</sup> or VI<sup>th</sup> century with a monastery built at Môtiers in the Merovingian era.

### A history worth its salt

Val-de-Travers points towards the east-west axis. It is mentioned in Latin, valle transversa, in the Middle Ages. Since this time the region has established itself as a significant crossing point for various goods being passed in transit between the Franche-Comté and the Swiss Plateau including salt from Salins. Over the centuries, Val-de-Travers has benefited from this trade which was conducive to establishing the new techniques developed throughout Europe.

### A certain Florius

The first mention of Fleurier appears on a parchment from 1284 written in Latin. The village was then part of the Val-de-Travers lordship, first controlled by the Vautravers lords and then by the Counts of Neuchâtel from the XIV<sup>th</sup> century. Surrounded by three hills, Fleurier is built where three rivers converge: the Areuse, the Buttes and the Fleurier. According to experts, the village was named after a Roman villa which belonged to a certain Florius.

### 4 12 The father of Fleurier's watchmaking



View of Fleurier in 1760 by Georges Louis Couleru

Watchmaking was introduced to Fleurier in as far back as 1730 when it was nothing more than a rural hamlet. Having just completed his training, David-Jean-Jacques-Henri Vaucher returned to the village at the age of 18, bringing with him the expertise that would ensure the region's prosperity for centuries to come. The place of his apprenticeship remains a mystery: the Neuchâtel Mountains, according to a myth that links him to Daniel Jeanrichard, or, more probably, Geneva

### A talented master

The young man knew how to produce every part of a watch. He taught other villagers his art and there were already some fifteen watchmakers in Fleurier by 1750. The sector grew in size and no less than 106 watchmakers were recorded in 1794. Among them, three sons of the master who went on to found the Vaucher Frères company at that time. An unprecedented demographic boom accompanied the development of the watchmaking activities and the population went from 450 inhabitants in 1750 to more than 800 at the end of the century!

### A timely supplement

Until the late XVIII<sup>th</sup> century, watchmaking was essentially a seasonal activity which provided craftsmen or farmers experiencing slack periods with a supplementary income. The pieces were produced at home, in small family studios. The raw materials were provided by merchants who then collected the items produced, assembled them and sold the clocks and watches.

### 5 12 The hazards of exporting



The Piaget company in La Côte-aux-Fées

Subject to the hazards of exporting, the watchmaking sector was heavily dependent on the international markets and sometimes faced quite tough competition. The first watchmaking crisis occurred in the late XVIII<sup>th</sup> century. At that time the sector was crippled by the Napoleonic Wars and the continental embargo. Other challenges shook the village in the late XIX<sup>th</sup> century and in the period between the two wars.

### The most violent of watchmaking crises

The arrival of Quartz watches in 1970 caused Swiss watchmaking to be plunged into a slump harsher than any seen before. This would be exacerbated by the petrol crisis. Companies closed or relocated one after another. In twenty years, the number of watchmakers in Fleurier fell from 742 to 160, while Val-de-Travers lost one guarter of its population. Within the region, only the Piaget company in La Côte-aux-Fées, would go on to survive this long period of wilderness.

### A breath of fresh air!

Faced with these challenges, the village demonstrated great solidarity and unshakeable willpower. Technological innovations the opening up of new markets and the genius of a few men enabled the village to get back on its feet, although sometimes painfully, after each blow. This ability to find the basis for a revival in tradition has enabled Fleurier's watchmaking to



Bugatti Atalante timepiece by Parmigiani Fleurier All rights reserved - Parmigiani Fleurier

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A few masters

Although David-Jean-Jacques-Henri Vaucher was responsible for the initial watchmaking developments in the village, each auspicious period is associated with a great name. By opening up the Chinese market in around 1820, Edouard Bovet gave Fleurier's watchmaking a dramatic boost. The Chinese calibres ensured the region's prosperity for several decades. In the late XIX<sup>th</sup> century the sector faced tough competition from American manufacturers who had introduced chain work. Driven by Jules-Samuel Jequier and his son, the traditional établissage method of production made way for mechanized factories. This process resulted in the merger of many of the region's manufacturers in 1915 into Fleurier Watch & Co, a watchmaking giant that exported across the five continents. Following the devastation of the sector caused by the economic crisis of the seventies, it was a highly talented and passionate watchmaker who mapped out the route to revival. Specialising in the restoration of vintage pieces, in 1995 Michel Parmigiani launched his own creations with support from the Sandoz Family Foundation, announcing the revival of Fleurier's watchmaking and its influence on the international scene.

### Men of conviction

Extremely attached to their region, the area's great watchmakers are often memorable characters, independent in spirit and open to the world. Often actively involved in community life and concerned with the common good, several of them played an active role in the revolutions that would end in foundation of the Neuchâtel Republic.

### 7 12 A village living on Chinese time



Period illustration of Canton port All rights reserved - Bovet Fleurier

Until the XX<sup>th</sup> century, Val-de-Travers was one of the main axes crossing Europe from the east to the west. This enabled the region to benefit from regular links with the outside world. This opening-up to the world promoted the liking of the region's inhabitants for travel while facilitating exports of local production. And it is from one such traveller that the amazing history of the Chinese watch was born

In 1818, at the age of 21, Edouard Bovet set out from London to Canton in China. The young watchmaker from Fleurier took four pocket watches with him which he sold at a high price upon arrival. By so doing, he opened up the doors of the Chinese empire to the Fleurier watchmaking industry without realising the impact it would have on his village. The huge Chinese market bought a large number of watches and numerous studios were working at full capacity to supply the Bovet brothers. Their success incited other companies to establish offices in Shanghai and Canton.

While the village had less then 200 watchmakers in 1800, more than 2000 people were recorded as active in the sector in 1900. In that same period the population in Fleurier went from 800 inhabitants to more than 3300!

### Two make a pair

The "Chinese" watches were sold in pairs in keeping with a Chinese tradition of giving gifts in duplicate. Unofficially however, there is a less colourful explanation for this cultural idiosyncrasy: in a country without bell towers and thus reference timepieces, owning two watches meant that if one stopped because it had not been wound up, you could just check the time on its twin

### **Charles-Edouard Guillaume Nobel Prize for physics**



Portrait of Charles-Edouard Guillaume Illustration provided by the Guillaume Foundatior

Charles-Edouard Guillaume was born on 15 February 1861 in Fleurier, into a family of watchmakers. When he was a young man, he saw watchmaking transformed, from a traditional activity to industrial production. After obtaining a doctoral degree from the Swiss Federal Institute of Technology in Zurich, he became an officer in the artillery and developed an interest in ballistics and mechanics. In 1883 he was hired at the International Bureau of Weights and Measures in Sèvres as a physicist. He remained an officer there for the rest of his life. Most of Charles-Edouard Guillaume's research centred around metrology. In total he had more than 600 alloys made and tested, some of which were used in watchmaking. Among those, Invar and Elinvar enabled watchmakers to rectify the irregularities of timepieces caused by temperature fluctuations and the excess elasticity of traditionally used metals.

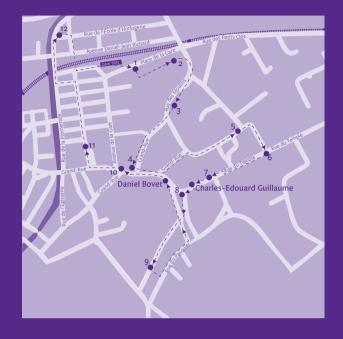
As the crowning point in his career, he was awarded the Nobel Prize for physics on 12 November 1920

Charles-Edouard Guillaume's discoveries were also applied in other fields such as lightbulbs or even colour television. He died on 13 June 1938 in Sèvres and was buried in Fleurier where he remains to this day

### **Invar and Elinvar**

Invar, invented in 1886, is an iron and nickel allov to which a little carbon and chrome are added. It presents a virtually invariable thermal expansion coefficient, hence its name. The benefit of this metal is that it enables watches to maintain virtually perfect accuracy in spite of temperature fluctuations Elinvar, discovered in 1919, is an iron, nickel, chrome and titanium alloy to which a little aluminium, silicon, cobalt and carbon are added. As its name suggests, it provides a virtually invariable elasticity coefficient making it an ideal component for watch springs.

8 12 **Ever-changing production** methods



#### General project monitoring

Laurence Vaucher, curator at the Val-de-Travers Regional Museum, Florian Serex, Director of Vaucher Manufacture, Paul Clémenti, Head of Specialities at Vaucher Manufacture, and Jean-Nat Karakash, town counsellor

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eneva University of Art and Design / Interior Architecture Emma Fuller and Natalia Malyukova

#### Board production

Neuchâtel Centre for Professional Integration in Couvet

#### Acknowledgements

In addition to those involved in creating the trail, the town of Val-de-Travers would like

The Bovet, Chopard, Vaucher, Parmigiani, Piaget and Valfleurier watchmaking factories. Institute in Paris for graciously providing artwork, illustrations and photographs. Companies Vaucher Manufacture, Chopard Manufacture and Parmigiani Fleurier, and Michel Parmigiani, from Parmigiani Fleurier and Nicolas Stauffer, from Piaget, for



Modern watchmaking studio All rights reserved - Vaucher Manufacture

Whereas original watchmakers produced all of the watch parts themselves. Fleurier's watchmaking was based on the établissage method from the outset. The watch parts are manufactured by local watchmakers, usually working from their homes. The établisseur buys the components required and proceeds with the assembly.

Towards the end of the XVIII<sup>th</sup> century, small independent units specialising in the production of specific components were established within the studios.

From the mid-XIX<sup>th</sup> century, the process of mechanization began. Industrialisation was underway and at the start of the XX<sup>th</sup> century, the watches were mostly chain produced in large factories.

Nowadays, watch manufactures combine the extraordinary expertise of their ancestors with cutting-edge technologies to ensure impeccable production quality.

### Great ingenuity

The watchmaker is also his tools. It is therefore not surprising that the region has developed a veritable industry of watchmaking tools and equipment. The valley has had up to around twenty companies active in this field, mostly established in the neighbouring village of Couvet. The ingenuity of tool designers has played a fundamental role in the efforts made over the centuries to maintain the competitiveness of Fleurier's watchmaking.

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### A profession that has to be learned



Apprentice watchmakers at work

Since the profession emerged, the majority of watchmakers trained with apprentice masters or within the family. That said, Fleurier has also been home to no less than three watchmaking schools during its history

The first was founded in 1851 on the initiative of a generous donor. In spite of the benefits it provided, the school ran into organisational difficulties which prevented it from meeting the donor's philanthropic objective. After ten years the latter abandoned the project.

A second school was founded by the town council in 1875 to meet the demand for gualified workers resulting from the industrialisation process. It was therefore necessary to train people capable of organising production workshops. In the late XIX<sup>th</sup> century, a mechanical department was added to the watchmaker training and a new building was constructed. The school continued its development until the global economic crisis forced it to close down in 1936

One class was revived from 1953 under the guidance of the Société des fabricants d'horlogerie. It trained practicing watchmakers for thirty years before finally closing in 1985 at the height of the watchmaking crisis due to lack of staff.

### Good intentions

It is to an industrialist... in cotton that the village owes its first watchmaking school. Having relocated to Mulhouse, Edouard Vaucher wanted to contribute to the prosperity of his birthplace. The school he founded in 1851 trained horlogers complets (all-round watchmakers). The aim of the project was to allow youngsters from poor families to receive free training which was quite unusual. The school immediately encountered difficulty recruiting both apprentices and tutors however. With the établissage system, the sector was hiring non-qualified workers in great numbers and poor families preferred to send their children out to work than to school. The school closed in 1861 and the building then became home to the Fleurier Museum and then the town library. The neo-classic annex dating back to 1883 was destroyed in 1976.

### Daniel Bovet **Nobel Prize for medicine**



Daniel Bovet

Daniel Bovet was born on 23 March 1907 in Neuchâtel. Originally from Fleurier, he was the son of Amy Babut and Pierre Boyet, a famous psychologist. At the age of 20, he obtained his degree in biology from Geneva University. From 1929 to 1947 he worked at the Pasteur Institute in Paris. His work earned him the honour, in 1946, of being appointed Knight of the Legion of Honour. In 1947 he left for Italy and founded a therapeutic chemistry laboratory at the Superior Institute of Health in Rome. He obtained Italian nationality in the same year He received the Nobel Prize for medicine in 1957 for his discovery of drugs capable of treating allergy symptoms: antihistamines. By focusing on the specific receptors for histamine, a substance released within the body when an allergen is introduced, antihistamines enabled the allergic reaction to be avoided. Daniel Bovet taught at several Italian universities until the end of his career and for two years he was head of the National Research Council in Rome. He died in 1992, aged 85.

### The taste of experience, from father to son

A psychologist and fluent in Esperanto, Pierre Bovet sometimes used his children for «experimental» purposes: Daniel Bovet himself admits with humour and goodwill having sometimes been his father's guinea pig. That is how Pierre Bovet came to teach his children Esperanto as early as possible, which makes Daniel Bovet one of those rare people in the world who learned Esperanto as their first language.

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### The challenge of growth



Fleurier railway station in the late XIX<sup>th</sup> century

While it had already doubled during the previous century, the village's population would more than quadruple during the XIX<sup>th</sup> century, going from 800 to almost 3400. The driving force behind this growth was clearly the Chinese watch, however other industries also contributed. At the time the village was home to a gloves factory, a matchstick production facility and numerous absinthe distilleries. As for the tourism sector, it was at its height. In 1900 the village had no less than 10 hotels with a total of 400 rooms.

The rapid growth in population represented a challenge in terms of collective infrastructures. The hospital, schools, railway station and gaslight all appeared during the second half of the XIX<sup>th</sup> century. The residential areas grew very quickly to house the new arrivals from Switzerland and elsewhere.

### A central square

The marketplace is at the heart of the village. To the south, the old village was built on the land attracting the most sun. Since the early XIX<sup>th</sup> century, beautiful homes have been built to the east, along rue du Temple, the road that leads to Môtiers. To meet the needs of the demographic boom, the village was then extended out towards the north. Residential districts were built in a grid pattern out as far as the station. The railway line was crossed at the turn of the XX<sup>th</sup> century with the establishment of new high density areas incorporating residences, schools and factories "on the line".

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### Town planning regulated like... a watch!



#### The village seen from the north, circa 1905

Like the watchmaker towns of La Chaux-de-Fonds and Le Locle. Fleurier experienced extreme demographic growth during the XIX<sup>th</sup> century. It was then a matter of quickly erecting housing and collective infrastructures to meet demand The most symbolic district from this time is the perfect grid stretching from here northward as far as the railway line. It comprises twelve similar sized sectors, formed by seven parallel streets, intersected in turn by three perpendicular roads. This district is made up of residential buildings with two to five storeys, bordered by a road to the north and sunny gardens to the south. In many cases, a side wall is shared by two buildings and the structures have been so soundly built that they remain mostly in their original condition.

These findings show that the solutions chosen to meet the demographic challenge demonstrated industrial values: rationality, sobriety, quality,

The grid like structure continues to the west, beyond the river. It would then extend out to the north, beyond the railway line, in the late XIX<sup>th</sup> century.

### UNESCO recognition

The towns of La Chaux-de-Fonds and Le Locle celebrated their inclusion as World Heritage sites in June 2009. This UNESCO recognition bears witness to the outstanding universal value of watchmaker town planning in the Neuchâtel Mountains. Fleurier is closely linked to this history. The village's town planning shows the same rates of development on a smaller

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### The adventure continues



Val-de-Travers as seen from the Chapeau de Napoléon restaurant

Since David-Jean-Jacques-Henri Vaucher, in 1730, Fleurier's heart has been beating in time with the watch. The village has linked its destiny to that of watchmaking, a source of employment and generator of wealth. It has experienced periods of prosperity, phases of intense developments and painful economic crises. Striking characters have enabled Fleurier's watchmaking tradition to continue across the eras by retaining the independence and authenticity that gives it its strength Today, local watch manufacturers are spreading the name of Fleurier the world over and it has become synonymous with quality.

We expect future centuries will also be devoted to the measurement of time. The village will undergo crises, brands will disappear, new ones will emerge and Fleurier will retain is highly specific watchmaking identity...

# Fleurier over time

Historic walk