

# History of Longines

by

André Francillon

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# Preface

The following is a translation of the text of *Histoire de la fabrique des Longines, precedee d'un essai sur le comptoir Agassiz* by André Francillon, first published in 1947.

I began this translation to find out more about Jacques David, the author of *Rapport a la Société Intercantonale des Industries du Jura sur la fabrication de l'horlogerie aux Etats-Unis* which I have also translated<sup>1</sup>. However, I found the whole book very interesting and decided that the extra effort to translate Francillon's words in their entirety would worth while.

This English edition suffers from two important faults. First, although I have attempted to capture the emotion and character of the original French, a translation must inevitably fall short; not only is some of the colour dependent on the language, but I doubt if I have done full justice to André Francillon's lively and delightful writing. Second, I am not able to reproduce all the original illustrations in a document distributed on the internet, and so I have only included the portraits and have been forced to omit the beautiful sketches of the factory and other scenes, and the tipped in colour plates of watch movements. Although the text stands by itself, and the absence of the illustrations is not a major problem, the story necessarily loses something.

Despite these drawbacks, I feel the book is well worth reading and my translation should be of use to people interested in Longines and its very important role in the development of Swiss horology.

I would like to thank Montres Longines for supporting my efforts.

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October 2004

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<sup>1</sup> *American and Swiss watchmaking in 1876, reports to the International Committee of Jura Industries on the manufacture of watches in the United States.*

# Part One

## The Comptoir of Agassiz

### The Arrival of Auguste Agassiz in Saint-Imier

At the beginning of the 19th century the territory, which for eight hundred years had formed the Évêché of Basel and which the Congress of Vienna was to make the Bernois Jura, belonged to France. Watches were manufactured in one of its valleys, that where Suze River runs and which is called Erguël. Thus Saint-Imier, formerly dedicated to agriculture and small crafts, was on the way to becoming a significant watch making centre. The authority in this village was divided between the mayor and the pastor.

The pastor, Louis-Rodolphe Agassiz, came from the canton of Vaud and had been installed in the month of ventôse of year XI, that is in March 1803. He left after a few years, but not without having earned the regard of all his parishioners through his zeal and example.

He continued his ministry at Motier in Vully, Orbe and Concise. His wife, born Rose Mayor, gave him four children: Louis, Auguste, Cecile and Olympe. Louis studied the natural sciences in Switzerland and then in the United States, and gained celebrity through his work in géology and palaeontology. Auguste, who had spent the beautiful days of his childhood in Motier with his brother, sometimes to run in the countryside searching for plants, sometimes taking lessons with the carpenter or the wheelwright, dedicated himself to trade. Cecile and Olympe married; the first son of Olympe, Ernest Francillon, will play his part later in this history.

Destiny often depends on fortuitous circumstances. That of Auguste Agassiz was decided 1832 when he was 23 years old. He had worked for a while in Neuchâtel, in the bank of his uncle François Mayor-Fornachon, and was on the point of undertaking a long trip, when Henri Raiguel, a dealer in the watch industry at Saint-Imier, proposed that he enter his business. Perhaps it was simply a consequence of the relationship which existed between the house of Raiguel and the Fornachon bank? Perhaps memories of the pastor Louis-Rodolphe Agassiz and the friendship felt for him were not for nothing?

Our young man accepted and was not backward in putting himself forward. Having a small fortune, he became the associate of Raiguel and a third person, Florian Morel, the owner. A contract was signed in front of a notary on February 25, 1833 to mark the event. Under the old company name of Raiguel Jeune & Company, the three associates would work together in the horological trade and the manufacture of watches.



*Auguste Agassiz in front of the collegiate church of Saint-Imier*

They engaged “for six whole and consecutive years beginning on the twenty-third of November eighteen hundred and thirty-two”. They reciprocally promised “the mutual confidence and respect necessary for the maintenance of good harmony between them; and if, God being displeased, a lingering disease were to smite one of them, the others will leave him the option to be compensated for by a third person, as far as possible, without being too demanding on his means.”

The watch making industry of old cannot be compared with what it is today. The division of labour had already been pushed very far, but large factories were unknown; factories which group all the phases of manufacture under a single roof and produce their own *ébauches* and most of their supplies. In those days *ébauches* came from Fontainemelon or Beaucourt, pinions from Haute-Savoie, gold cases from Geneva. One ordered dials from La Chaux-de-Fonds or elsewhere. The French bank of the Doubs River provided wheels as well as nickel and German-silver cases. To adjust and assemble these various parts, to make from them a living machine that counted the hours unceasingly, was no less dispersed. Such operations were entrusted to men working at home with their wives and children. A more enterprising watchmaker would join together with five or six companions in a modest workshop and deal with the successive operations.

The manufacturer, similar to the head of an army who operates without seeing the greater number of his soldiers, remotely controlled and coordinated these multiple operations. It was not a sinecure: for a daily output of two dozen watches, there would be six or seven hundred dozen in the workshop in all stages of production. Two or three employees assisted him; they controlled the deliveries from the suppliers and the tasks of the workmen, regulated the watches and checked quality. A clerk was in charge of letters and deliveries.

The name *établissage* is given to this manufacturing process. The manufacturers were commonly called *établisseurs* and their houses *comptoirs*<sup>2</sup>.

Messrs Raiguel Jeune & Co. had their offices behind the collegiate church of Saint-Imier, at the place where nowadays the fabric store "For the Four Seasons" is located. They had a barn and a stable. The barn attests to the fact that the village preserved its country aspect in spite of its industrial development. The stable sheltered the carriage which the owners used, to pursue a tardy supplier or to give to a master engraver the precise details of the decoration of some high priced piece. Twice each year one of them would leave by the highway. He carried beautiful goods throughout Germany which he displayed at the fairs of Frankfurt and Leipzig. If the economic situation was favourable he returned to Switzerland with his pockets filled with orders.

In the autumn of 1838 the terms of the contract expired. Henri Raiguel intended to leave the comptoir. Florian Morel, on the contrary, declared himself ready to remain there. Agassiz, in spite of a rather uncomfortable departure from Neuchâtel, only needed to return to be certain of success. Did he miss the facilities of the city and splendours of a lake so very close and yet invisible? But Saint-Imier

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2 I have retained the French words as there are no English equivalents.

also had its charms. Life there was peaceful and industrious. The forests, that in September were covered with gold and crimson, abounded in game and Agassiz liked hunting. Besides, who could forsake, after having devoted some time to it, the delicate and marvellous industry of watchmaking?

# The House of Agassiz

Auguste Agassiz and Florian Morel bound themselves for a new six year period from November 23, 1838. They acquired from Raiguel the buildings of the old company and the firm became Agassiz & Co. Over the years, the importance of this comptoir grew. The quality of its products very quickly developed a just reputation in Switzerland and abroad.

Until this time, our forefathers had only manufactured verge watches, museum pieces for us. Thick and heavy, they resembled those which Daniel Jeanrichard made around 1700, with the balance above the train. The six movements in a carton did not have the mathematical uniformity that one sees today, and they all carried the marks of the watchmakers who had worked on them with their hands. The purchaser was satisfied with an accuracy which appears quite poor to us: a watch varying by five minutes a day was a good watch.

Soon, however, the essential "calibre" was that to which Lépine, a French watchmaker of the 18th century, had given his name. The balance sat beside the other wheels and, at one stroke, watches became thinner. They were also more accurate thanks to progress in technique.

Each year the Agassiz comptoir produced several thousand lépines with a cylinder escapement. But for a long time it continued to produce the verge: our watchmakers are conservative people and, from instinct, a notable fraction of the public is also wary of new innovations. Whereas the craftsmen of the Neuchâtel Mountains concentrated more and more on the manufacture of gold watches, their neighbours of the Bernois Jura made a speciality of the ordinary article. A cheap watch but robust, such were the "watches of Saint-Imier".

In 1844 Agassiz and Morel decided to extend their association until the end of 1846. In addition, on October 10 1845 they signed a contract of agency with Auguste Mayor, a trader established in New York who was the son of the Mayor-Fornachon banker. Thus they started the relationship between Saint-Imier and that great American city which has continued until now, as our account will show.

"Messrs Agassiz & Co., declaring this act worthy, will send on consignment to Mr Auguste Mayor, in the United States of America, goods to be sold on their account and at their risk."

"Mr Auguste Mayor becomes the agent of Messrs Agassiz & Co. and, in this role, will take delivery of all the goods that they dispatch to him on consignment from Europe; he will make the declarations and take title to the goods at the ports of arrival; he will devote his time and all his attention to the care of these goods,

both for their preservation and their sale; he will keep accounts and all other useful notes; he will attend to sales and will collect the receipts and forward them to Messrs Agassiz & Co. after deduction of the expenses of the agency and his salary.”

Auguste Agassiz, having married one of the daughters of his uncle Mayor-Fornachon, was at the same time cousin and brother-in-law of his New York correspondent.

After Raiguel Jeune & Co. there was Agassiz & Co.; after Agassiz & Co., Auguste Agassiz. From a date which we can fix with some certainty as January 1 1847, there was only one owner of the comptoir. Florian Morel had departed, leaving to his former collaborator two trusted employees: his young namesake Lucien Morel and Frederic Bétrix, who was a little older and had been with the house for a long time.

The watch industry passed through a flourishing time. Because of the ease with which it provided work, the trade attracted increasing numbers of workmen. They started to desert the countryside ... Saint-Imier saw its population double in twenty years. Fire had devastated its east and west quarters one after the other, and destroyed many of its old, low-roofed farmhouses. Do not despair! Its inhabitants used this as a wonderful pretext to transform and renovate. They built large houses, pierced with the many windows that the meticulous labour at the bench required. They made two vast squares. The old tortuous lanes were replaced by beautiful straight streets. And Saint-Imier became the premier village of Ergüel.

Auguste Agassiz, enamoured with this industrious and hospitable locality, took a very active part in its development. A great worker himself, he created work for hundreds of people. The municipal institutions profited from his generosity. He was Mayor in 1846 and 1847, when he put his sharp intelligence and his firmness at the service of the public.

In 1848, an economic and political crisis shook the world. Dependent on exports, the Swiss watch industry felt it seriously and, cash being suddenly hard to obtain, it was plunged into a stagnation all the more distressing because of the full use of credit. Customers were allowed six or nine months after the forwarding of watches before paying their invoices. For the workman there were only two pay days each year: Saint George's day and Saint Martin's day.

The supplier had to show an equal patience. We can imagine the concern of the manufacturer who received not one penny from abroad, found the bank counter closed and owed large sums to all the world. Or the concern of the watchmaker who had only one instalment on his wages to nourish his family and then became unemployed.

The evil soon retreated and, thanks to the progressive constitution which Switzerland had just given herself and the extraordinary rise of the world economy, work began again more bountifully.

The career of Auguste Agassiz was, alas, as short as it was brilliant. His wife died at the age of twenty-five. He had hardly passed forty when disease obliged him to leave the business. Did he catch cold when, driving his carriage, he made the long journey from Leipzig? It is said that one day he returned from there very ill. With his three children he went to Lausanne to be cured. His cheerful character darkened somewhat, but he did not lose any of his benevolence nor his splendid generosity.

This departure, will it stop the fertile activity of the comptoir forever? On June 1st, 1850, Agassiz, “wanting that, not only his own business but also the interests of those people who are dependent on him, do not suffer at all from his absence, makes and appoints as his general and special agents, with power to act in his interests jointly or separately, one in the absence of the other: Messrs Frédéric Bétrix and Lucien Morel, both employees in his company”. Better still, he will visit them each time the doctor allows him to go there. By an accompanying letter he noted that he would always be, at the last resort, the guardian.

Saint-Imier expressed its gratitude to him by granting him an honour without precedent, citizenship<sup>3</sup>.

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3 Unlike in many other countries, a person is not a citizen of Switzerland, but a citizen of the commune in which he or she is born; on several occasions Francillon refers to communes of origin. Thus Auguste Agassiz was not a citizen of Saint-Imier and granting him citizenship was a great honour. This is similar to the English expression of giving someone “the keys of the city”.

## The Appearance of Ernest Francillon

Deviating from the simple form of *établissage*, the house arranged within its walls a workshop for assemblers. On April 23 1852 the direction of it was entrusted to Edouard Savoye, a watchmaker of talent who had been born in 1818 near Le Locle, his commune of origin, and had worked in Corgémont. Let us spare a minute for his contract of service and we will have an image of what the “good old days” were like.

“The working hours are fixed as follows: six hours in the morning in summer and to the point of the day at midday in winter; and from one hour to nine hours in the evening in winter, until the night has fallen in summer, except for a half hour interval for the evening meal. Mr Savoye engages moreover never to absent himself without the authorization of his heads and, in the event of a fire alarm in the village, to go to the workshop to lend every assistance which could be necessary there.”

It is advisable to add that, although work left little time for leisure it was carried out in a very good-natured and cordial environment. The owner and the watchmaker pushed each other. Each Monday, there were absentees, but it was useless to complain. For the rest, one could work hard when it was needed. The majority of the men, working from home, went to and from the *établissage* with a rhythm that was accentuated on pay days.

The administration of the two men, Bétrix and Morel, was not of long duration. One then the other left the *comptoir*. When did this happen? We think it occurred in 1854, when Auguste Agassiz made his power of attorney and, by it, passed all responsibilities to a new person, François Secretan. The arrival of Ernest Francillon towards the end of the summer 1852 and then, two years later, his final installation, corroborate our assumption.

A nephew of Agassiz, Francillon had been born in Lausanne on July 10, 1834. One of his ancestors, a huguenot from Dauphiné, came to Vaud and founded in that city a house which today still trades in iron and hardware. As he was intended to enter that business, young Ernest familiarized himself with the difficulties of German syntax in Stuttgart, and learned the mysteries of double entry accounting and the laws of political economy. However, at the request of his uncle, his father made him return and sent him to Saint-Imier.

Initially he was occupied with the business of the office. In June 1853, he “learnt his horology” in a workshop in Môtiers, in the Val-de-Travers. He devoted more

than a year to this training. In the future, as the *établisseur*, he will understand the techniques of both sales and manufacture.

Assiduously going to the fairs, our people had formed contacts in several German towns. Auguste Mayor, soon to be assisted by his cousin Charles Fornachon, built a fortune and was, with some others, at the forefront of the New York market. Lastly, to these old outlets some new ones had been added. One day Ernest Francillon is seen going to Vienna, a very commercial city at this time and which, once conquered, opened the doors to Bucharest and Prague. On another he is seen in the bustle of Paris, a capital no less fond of beautiful watch delicacies, but where the Swiss manufacturers start to run up against bisontine competition.

In the afternoon of September 4, 1856, the alarm bell sounded in Saint-Imier. A fire had started in the main street and, under the force of a violent north wind, spread rapidly to the west. Water was lacking and the firemen feared they would not be able to control the calamity. The occupants of the *comptoir* started to remove books and goods. A good thing, because the old house was soon a blazing inferno. Braving the smoke and flames, Ernest Francillon arrived and, with the assistance of Edouard Savoye (and undoubtedly other people present that day), took everything to safety. The disaster was only controlled in the middle of the night; by then it had consumed sixteen houses.

As the Neuchâtel Royalists had risen up, the following day the young man had to don his lieutenant's uniform and join his battalion, which was a day's march in advance of him. "I sent to the devil this bunch of fanatics", he wrote, "who dragged me from my work at such a critical moment."

After his retirement, Agassiz had built above the village, in a street which bears his name, a house surrounded by a garden where he grew yew trees, roses, laburnums and other scented plants.

It was there that the *comptoir* reorganized. After the fire it was in a lamentable state: cartons, *ébauches*, wheels and screws, all were mixed up "and simple mortals", joked Francillon, "cannot figure out the ground up movements". The assembly workshop did not produce the results that were expected and was not restarted. Edouard Savoye had left it "to become an examiner to the *établissement*". The other examiners, of whom memory has been preserved, were Auguste Nicolet and Jacob Rickly.

At the end of August 1857 the nuptials were celebrated of Ernest Francillon with Miss Ida Grosjean, daughter of the pastor at Court, near Moutier.

The watch industry then underwent the first effects of a new economic crisis, which lasted five years. The *comptoir* did not go through it without problems,

because it suffered from internal difficulties. It accumulated goods in its stores, was outdistanced by more active competitors and lost, little by little, the position which its concern with quality and innovation had formerly given it. Auguste Agassiz, now infirm, seldom came to Saint-Imier. Was the business badly led in consequence? Were the wisdom and authority of the master missed? His nephew wrote: "the house has unfortunately lost much ground these last years; a kind of numbness had seized us." Francillon saw clearly. He wanted to take control. And the circumstances would help.

Having received the power of attorney of his uncle, he shared responsibilities with Secretan. In 1861, Agassiz decided to sell up. Who will succeed to him? Secretan or Francillon, or both together? The first wanted an association, the second preferred two distinct houses each having its own speciality. Finally, Secretan gave up the business of watch manufacture and Francillon was alone to take over the comptoir. The date of this change was July 1st, 1862.

In fact Ernest Francillon assumed control in 1861. He undertook at once to reorganise the personnel and the methods. The house, as we said, had sunk into routine. Far too high, its prices no longer corresponded to the "watch of Saint-Imier". Its manufacture was squandered in variety. The output no longer matched the effort. There was safety in increasing production of the ordinary watch, and Francillon energetically got busy with it. He endeavoured to reduce to the essentials the "innumerable types, heights and qualities" and to use the same articles indifferently "for the commissions of Vienna and New York". By splitting up the finishing and by opening a new assembly workshop in the comptoir, more judiciously conceived than the old one, he produced an improvement in quality and savings in outlay and time.

International trade seemed to recover from its torpor. But in the United States, where the representation of the house had passed from the hands of Auguste Mayor, who had returned to Neuchâtel, and Charles Fornachon, who became a gentleman farmer, into those of their former collaborator J. A. Abry, business was blocked by the American Civil War. In Vienna, where an agent by the name Alex Graner worked, there was a new slackening. The store in the comptoir was often full. The loans requested from the banks had reached their limit. At the end of each month, and on Saint Martin's day and Saint-George's day, to pay suppliers and workmen became a real headache.

# Ernest Francillon, Successor of Auguste Agassiz

On the morning of July 1, 1862, more than one passer-by stopped in front of number 11 Rue Agassiz, undoubtedly astonished to see a new plate there which read:

*The Old House of Auguste Agassiz*

*ERNEST FRANCILLON*

*Successor*

Thus, rich with experience and at the same time young, Ernest Francillon became the master of this famous comptoir. Could the future have opened up for him under more brilliant auspices? Auguste Agassiz, moreover, did not leave the business completely. He provided a hundred thousand francs as a sleeping partner and reserved the right to keep an eye on the business. It will be seen that until his death, which occurred much later, he did not cease to be a remote but active adviser to his nephew, an often severe but very well informed critic.

In spite of the civil war, which continued to drench the United States in blood, trade revived in New York and in the other northern cities; J. A. Abry complained, but sold. If the fairs of Germany had lost their importance, Austria was prosperous and Alex Graner signed large orders.

The *établissage* was producing more than 20,000 pieces per annum. The *lépine* with cylinder remained the principal article, however the lever movement was gaining in favour. The comptoir had launched watches for ladies of 12, 13 and 14 *lignes*, remarkable sizes at this time and they were very successful. As for the *verge*, they were liquidated at low prices, considered rightly to be old-fashioned. The spread of the keyless winding mechanism, making it possible to wind a watch without the help of a key, characterized this time from a technical point of view. The invention was not new, but there were difficulties in applying it to cheap watches. Among the various more or less clever systems which were invented, Ernest Francillon endeavoured to find the most rational.

During booms watchmakers, badgered on all sides, increased their prices and produced bad work. The examiners then had twice the work to do. The manufacturer who raised his prices, wanting a return on his expenses, was likely to lose his customers. In a house dedicated to the production of a modern watch, the problem

arose with extreme acuity. Also, Ernest Francillon was anxious to make his manufacture more economic. He was pleased with the assembly workshop which he had previously set up in the comptoir. On his advice, a case maker of La Heutte started to make metal cases with machinery. "He has organized his business so well", wrote Francillon to his uncle in June 1864, "that he will provide me with twenty-four dozen of them per week when I want them. He is going to expand his establishment by employing dome and spring makers. You will understand the advantages that I will gain: economy and quality will be the main results."

There was another crisis in America during the summer of 1864. J. A. Abry had a large quantity of goods on hand and sold nothing. The house of Saint-Imier suffered from a "great embarrassment". The recovery, fortunately, soon arrived and was followed by good news: On April 9, 1865, the American Civil War ended.

The representation of the comptoir in the United States was to remain the prerogative of Abry until December 31, 1865. Then it was entrusted to J. Eugène Robert, a young employee of Abry who came from the Neuchâtel Jura and was financially supported by Auguste Mayor who had been, twenty years earlier, the New York correspondent of Agassiz. Francillon hoped for much from this change. He counted on Robert to re-conquer the preferential position that the agency had occupied on other side of the Atlantic. He promised on his part to increase production and declared to him: "I am at the head of a well organized house which is poised for great developments. I rely on my star and, having decided to make my own way, I propose to work hard."

This was no fanciful boast. An enemy of routine, he had worked by the rule "always progress". His experience had shown to him how advantageous it was to equip the workmen in their own homes and to use machines. There had already been effective reforms, but they were only reforms and he thought of a revolution. A revolution meant for him freedom. Too often, indeed, he had suffered from delays because of his suppliers. Too often he had suffered under the rule of the powerful ébauche factories. The revolution, moreover, appeared necessary to fight the competition from the French national industry and, more recently, the Americans.

At the same time as he forged the future of his New York agency with Robert, in the second half of 1865 he informed his uncle Agassiz of a significant project. He wanted to set up a factory to manufacture complete watches and for that to use machines. At that time, except in a few isolated cases, the Swiss watch industry worked according to the system of *établissage*, and the idea was certainly bold. We know the way in which it has developed since then.

# Part Two

## The Longines Factory

### Foundation

Let us admire the foresight of a man whose age and illness had kept him away from the business for many years and who, in spite of that, did not hesitate to embark on a very new route! Auguste Agassiz endorsed the arguments of his nephew, approved his intentions and renewed the partnership with him. But, he added, who will choose the machines? Who, if need be, will build them? Who will guarantee that they will function meticulously? We have in Saint-Imier excellent watchmakers, but they are only watchmakers. We need a new element in our ranks: the engineer.

This position was reserved for Jacques David, a relative of Agassiz and Francillon. Of huguenot stock like the others, he had been born in Lausanne on March 18, 1845 and had spent his youth in Saint-Quentin, where his father ran a mechanical weaving business. Later he went to Paris to study at the Central School of Arts and Manufactures. It was agreed that when his studies finished he would return to Switzerland and undertake an apprenticeship of three years in the watch industry.

The factory was to be placed on a river, because it could draw its motive power from only one source, an hydraulic installation. The fairy Electricity, a character of modern tales, had not yet spread her innumerable benefits and, for lack of a railroad allowing the transport of coal, steam could not be considered. Drawing back from other projects, which had turned him in different directions, in March 1866 Ernest Francillon purchased two adjacent pieces of land located near Saint-Imier, on the right bank of the Suze at the locality called *Longines*.

One belonged “to Mr Adolphe Ferrier, case assembler” together with “Lady Lisette born Hofmann, his wife”. It included a garden, an orchard and an old residence, previously known as the Sagnes Mill in which generations of millers and tanners had lived. There, at the beginning of the century, a “blacksmith edge tool maker” had installed a “trip hammer factory”. The other piece, simple “cantonal meadow land”, was an unattended field owned by François Meyrat-Langel, a former *établissement*. A clause in the sale contract referred to the river which, at

this place, deviated from its bed to follow a channel and so lead to a fall. “Mr Francillon”, it says, will have the right to place locks, but no other construction, in the channel of the Suze, by attaching them to Mr Meyrat-Langel’s bank as well as to his own.”



*Ernest Francillon in front of the Longines factory at the end of 1868*

The factory was not set up immediately. Undoubtedly it is necessary to seek the reason in the depression from which industry then suffered, and perhaps also, as will presently be seen, in the Francillon comptoir.

May 8, 1866 was marked by a small event: the son of Auguste Agassiz entered the house and at the same time undertook an apprenticeship in watchmaking. Georges was his name. On paternal advice, he had given up medicine to be able, one day, to assist his cousin. He proved reliable and was soon entrusted with “letters and the *petit train* (the motion work) in the *établissement*”.

The local section of the Jurassic Emulation Society was set up at that time in the School of Watchmaking in Saint-Imier. Ernest Francillon had battled for this advance and Auguste Agassiz, in his way, had facilitated its realization. The factory of tomorrow will need skilled workmen.

After the American Civil War came the Austro-Prussian war. For a house living on its relationships with New York and Vienna it was not good fortune. Austria was crushed in July and its economic future was seriously compromised. Discouraged, Alex Graner no longer wanted his agency; perhaps he might open a retail store. Francillon quickly induced him to stay and declared that he wanted him to retain the prerogatives of representing him. "I will be satisfied with a limited profit", he wrote, "it is a comfort because, as you know, I never planned the business in Austria to bring me a fortune; I sought there a counterbalance, a second string to my bow, and in moments of American crisis it has been invaluable to me and occupied my workmen."

Alas! sales in the now peaceful United States did not reach their old levels and Francillon's debt grew. His credit suffered. His bankers demanded guarantees. He pledged 60,000 francs worth of watches assessed at cost price. He heavily mortgaged the building which sheltered him and his comptoir. Will these trials cause his marvellous project to collapse like a house of cards? Will the establishment that he already called the Longines factory remain a beautiful dream? No! He was sure the path which he followed could only lead to success. The embarrassments of the moment disappeared in the face of his optimism.

In the valley the peasants completed their ploughing. Dead leaves were strewn on the streets. Feeling the frosts come, ravens left the forest for the village. Construction, started some time before, is halted part way. After a fashion it continued during winter and the Ferrier house, which was derelict, was demolished. In spring 1867 the factory was finished. Walls of brick, timber framed on the higher half of the frontages, a roof with two sides, could a structure be less pretentious? Do not think it too slight, because it rests on a base solid enough to defy time.

A dam had been built above the fall. The engine, a turbine of ten horse power with a horizontal shaft, turned for the first time in June, taking its force from the river and starting all the beautiful new transmissions. In the mean time nothing could be done as long as the fabled machines, which remained mysteries to the établissements, had not been built; and as long as calibres adapted to the new method of production had not been designed. An old watchmaker steeped in mechanics, Edouard Chatelain, worked for five or six months, initially in his own workshop in Geneva and then at the Longines factory, to which he transported presses and

punches made by him and where he found assistants in some workmen who had come from the comptoir or who had recently been employed.

Jacques David, after having successfully passed the examinations of the Central School, had been in Le Locle for nearly a year: he studied the delicate actions of the watch and was taught to handle the file, the graver and the hammer. Edouard Chatelain asked that David cut short his training, because he wanted to inculcate him with the theory of escapements in his own way. Each master watchmaker had personal views on this subject; the designs of the Genevans differed from the teaching of the craftsmen of the Mountains. As the health of the mechanic gave some concern, Ernest Francillon, for his part, judged it right to hasten the arrival of the engineer.

At the end of summer David was in Longines and wrote to his father: "I work especially with Mr Chatelain, our watchmaker-mechanic, the lone pilot of this ship from the point of view of manufacture. He is an old expert who knows a mass of things about mechanics and watchmaking, and who has an almost limitless collection of new ideas. The misfortune is that these ideas are muddled together and cling to each other, forming an extremely complicated labyrinth in his poor head. He jumps from one idea to another and stops at most interesting. My role at his side is to put into execution and to follow through those ideas that directly affect the production schedule, to influence him and focus him on the problems that need to be elucidated."

"We are not yet ready to manufacture the watch. All the tools are designed and are more or less in the hands of our mechanics, but six months or more will pass before we will be able to produce a calibre entirely from our factory. For now, the tools are used, as they become ready, to work on the tasks of old the *établissement*. All this is done in family, because we have only six workmen."

The mechanics posed a thousand and one riddles to the researchers. Except for some machines which were publicly available, they all had to be created. This effort, nonetheless, did not dishearten them. At that time they spent eleven hours each day at the bench. In the evening, gas lights were lit to finish the work.

The old comptoir continued to live its own life; it was invaluable for supplying watches. Alex Graner, who wanted a new association with his supplier, had been re-signed, and J. Eugène Robert, was impatient to receive the "Longines" watches whose qualities Francillon had already praised ...

The year 1867 was ending when the Longines workshop began the new manufacture. A cutter attacked rough brass. Lathes and drilling machines worked plates, bridges and barrels. The arbor machine turned. In March 1868, the plates, barrels,

wheels and pinions being finished, Francillon noted: "Altogether, much has been done, but much more remains."

The irascible and odd character of Edouard Chatelain disturbed the atmosphere of the factory. This man was wary of everyone and feared above all else that his ideas would be frustrated. By contradicting him, one caused a scene with the owner. But they could not, during this incubation period, do without his extraordinary gifts. "He made things that others had not dared to try", said Jacques David, "and who, if they had tried, abandoned them as follies at the first sign of failure. His perseverance and his genius overcame difficulties." He knew steel and the manner of treating the various types of it better than anybody else. His gravers, for example, were incomparable and could work for five days without sharpening.

To keep him, Francillon had to resort to some sacrifices. On one occasion he restored calm only by releasing Roussillon, a young Genevan watchmaker who had displayed talent in several professional competitions. It was then the turn of David to face the anger and the sulking of the mechanic; and in June 1868 he bade farewell to his friends in Saint-Imier and returned to Le Locle to finish his training. For Chatelain, this departure was final. For Ernest Francillon and Auguste Agassiz, joined to their relative by inalienable obligations, it could be only temporary. Edouard Savoye, who was one of the first craftsmen employed in Longines, also suffered the threats of Chatelain, but on this occasion he avoided taking such extreme measures.

Francillon shared his time between the village and Longines. At the comptoir, his principal concern was to complete and distribute the old merchandise under the best terms. But he was devoted above all else to the organization of the factory. So that the machines did not stop during droughts, he ordered a second turbine which was set up below a dam in the neighbouring meadows, which held six hundred cubic meters of water. He erected a second building, an extension of the first. The offices and workshop in the Rue Agassiz were closed to be set up at the edge of Suze, in fine and clean buildings. The factory took an air of importance and employed forty people. The comptoir had ceased to exist.

## First Samples

“Our purchasers do not come any more. Some are out of the country, others do not need anything, and finally others find that it is too hot to travel from home. In short, our sales for this month reached only one ridiculous digit which is not a tenth of that for our good months. Many are discouraged. We, however, count on the future of Longines and we are patient. Next week we will have the first samples; this time, I hope that we will not be given a new date for delivery and that we will have them.”

The tone of this letter, written in New York in August 1868, is symptomatic of the state of mind of two young people in a hurry who were launching a great innovation to drag the market from its torpor. One was J. Eugène Robert. The other, the author of the letter, was Georges Agassiz; earlier that year he had left Switzerland for the United States to add to his growing commercial knowledge.

Twelve Longines watches finally arrived in early September ... Alas! all did not go as well as expected from the best of watches. The Americans admired the solid and regular design of this movement made by machines, but they had only criticisms for the escapement. In fact, these samples went badly or even stopped.

A telegram informed Francillon of this failure. Then fate decreed that, in circumstances where every moment was invaluable, Edouard Chatelain suffered from an attack of rheumatism and had to keep to his room. Restored, he undertook to correct the defective escapement. He had plans for an entirely new system to be built with machinery. But his research was prolonged and did not leave the realms of theory. By an unexpected change in his fickleness, the poor fellow made it clear that if Mr David returned there would be work for him. Little by little the memory of the scenes of June were erased from his mind. Finally, Mr David became essential and it was absolutely necessary that Mr Francillon went to Le Locle to get him to return. In March 1869, the engineer and the mechanic prepared the tools for a new calibre together ...

Once more the anguishes of financial embarrassment attacked Francillon. His customers were long in paying him. The factory had been very expensive and still did not bring in anything. He owed a large sum to Auguste Agassiz and did not know how to raise it. “My back is broken with sorrow”, he wrote to him in May 1869, “I no longer know peace and happiness.” Agassiz who, in his retirement in Lausanne, had followed the development of the business in all its details, had become “a little sceptical of the use of mechanical methods”. His nephew even suggested to him that Chatelain had exaggerated the role of machines and he was

wrong to neglect the councils of the old watchmakers. Inflamed by his passion, he then posed the following principle: “to ask machines only to do what they can give, round roughing, turning, filing and polishing, but not to ask of them more than they can give and especially not to believe that they can do without the watchmaker.”

In this same May, Edouard Chatelain left the business. Mechanics was brought back to its true basis; the opinions of the watchmakers were no longer ignored and manufacture took on a more traditional style. As it was necessary to produce without any more delay, the technical developments were put aside for the moment.

A new batch of samples, provided simply with the common lever escapement, was dispatched to the other side of the water. They were large key-wound watches. They went well and this time satisfied the wishes of the New York watchmakers.

Georges Agassiz prepared to return to Europe. He thoroughly understood the tastes of the American market and the way in which business was done there. When Robert visited Boston or Chicago he assumed the direction of the agency. He had spent his holidays with the family of his uncle Louis and accompanied the geologist on one of his celebrated scientific voyages, exploring the coral banks and the islands that nature strewed between Cuba and Florida. The museum of Saint-Imier, of which he was the most zealous founder, owes to him its beautiful specimens of tropical fauna.

On his return the factory displayed intense activity. The reports received from Vienna were less favourable than those from New York and Alex Graner, who had initially been reticent, criticised Longines.

The key wound watch was followed by a stem wound watch. Contrary to the ébauche factories, which mainly delivered calibres with multiple bridges, a large calibre with a robust top plate covering the train was preferred. Various alternatives based on the best types were being studied. Parallel to the models which the factory made from A to Z, for a few years it continued to produce some old models by établissement, those which had remained in favour with customers in the Danubian cities.

The capital raised by Francillon and the partnership with Auguste Agassiz was not enough for the company, which depended on the goodwill of bankers. This weakness was the cause of many evils. Its overdraft often reached an exorbitant figure. The Marcel bank in Lausanne was its principal creditor. Family ties linked the Marcells with Jacques David, Agassiz and Francillon, but business is business and sometimes they had to be extremely demanding. Thus in October 1869, Francillon was forced to provide a guarantee to his father, mortgage the factory and promise the rapid refunding of the excess of his debt.

At that time, frightened by all the money that the small factory had absorbed, Auguste Agassiz displayed an angry mood towards his nephew. His son Georges was uneasy, but assured him that he had “full confidence that the company would soon succeed”, in spite of its “precarious” state. The same faith animated Jacques David. On more than one occasion, David and the young Agassiz supported Francillon against the criticisms of his uncle. A number of obstacles were overcome thanks to this cohesion between the three men who held the destiny of Longines in their hands.

# The Birth of Fame

It would be nice to write: After three years of groping and experiments, the Longines factory was dedicated to production and became prosperous. Unfortunately difficulties would continue for a long time. Several times we have raised the role played by prices in the Saint-Imier watch industry. What was true for the comptoir was true for the factory, and J. Eugène Robert, coming in the first weeks of 1870 to seal the friendship which bound him to the house, declared accurately that, for significant transactions, Longines must have a price advantage over similar models from old the *établissage*: “It is not enough to say that it is better, it is required that the model No 11 made mechanically be at a price below that of our competitors. If those are sold for 23 French francs, it is necessary to sell a similar one from Longines for 22 francs.”

On March 30, 1870 Georges Agassiz accepted the position of manager from his cousin Ernest. His principal occupation was keeping the accounts.

The Franco-German war did nothing but exacerbate the stagnation of the struggling company. The owners and many workmen had to answer the order to mobilize from the command of the Swiss army. Mrs Ida Francillon went to her husband's office to dispatch the current business. “People are starting to be a little discouraged”, she observed on August 3, “some are impatient and everyone would like to see an end to the uncertainty in which they live month by month. Some *établisseurs* still work as usual; others have slowed down or almost stopped. For all, the question of money is central.”

Little by little, however, the factory came to life again. Ernest Francillon, who had been at the border in charge of a battalion, was laid off and went back to work with his collaborators. Perseverance was needed. The accounts of June 30 1870 showed a considerable loss. It was with a heavy heart that Francillon announced the news to his uncle in September, adding: “Faced with such a disaster, I do not know what you will think. I see three solutions: 1. An immediate liquidation. 2. A liquidation deferred to June 30, 1874, ending the partnership. 3. To take courage, continue on the current footing, ask for your help to repair the present breaches, and to immediately take suitable measures to stop the deficit.”

After such hard and long efforts, the word liquidation was terrible. To succumb when success seemed so close ... With all his energy, Francillon pleaded for the third solution: “If the good God gives me life and health, I feel that I can lift up our business. The most strict economy will govern Longines. Work there will be increasingly controlled, done with ever more intelligence.” He went to Lausanne

for the consent of his uncle. His cousin Georges supported him. Auguste Agassiz let himself be convinced.

The first means of stopping the losses consisted in liquidating the foreign agencies. This system might be appropriate for the comptoir, but the factory, head over heels in debt because of the large formation expenses and responsibility for the bulk of the parts in hand, did not have sufficient resources to take upon itself the distribution of its articles as well as production. The importers had to be made to buy Longines watches “from the factory door” and for that they needed to build a watch famous for its economy and its precision at the same time.

The agency in New York was the most significant. Ernest Francillon wanted to modify the contract which bound him to his agent, but unfortunately Robert, who had also accepted his share of sacrifices, could not be persuaded to take the same view. As there was no question of giving to others the opportunity to reap what together they had sown, they stuck to the status quo. Besides, the market was active and Robert begged for consignments. The success of the new trademark was due to his vigour. He did not miss a single opportunity to encourage Francillon and his aides. If some aspect of a case or the construction of a calibre had been modified he made a detailed criticism of it. On October 2 1871, he took an associate in the person of Joseph Fornachon, son of Charles. The corporate name became J. Eugène Robert & Co.

A well managed watch house has all kinds of controls. Each watch has a number and has, in a special book, its true curriculum vitae. To that accountancy correspondence is added. The heads of the factory themselves did a good part of this very meticulousness and often unthankful work. Some trusted employees helped them. One of them, thanks to his sense of business and responsibility, quickly became the commercial collaborator of Ernest Francillon. He was Baptiste Savoye, son of the watchmaker who had, in 1852, joined his fate to that of the house. Born in Corgémont on October 8, 1851 he had a long apprenticeship in a bank in Saint-Imier before entering the office of Longines on New Year's Day 1871.

1872, 1873 and 1874 were years of trials, hopes, and disillusionments ... Will the end of problems never come? problems that day after day limited mechanical manufacture? Will the losses and loans never end? Not to forget the denigratory and mocking remarks which, like any other new venture, the “Hydraulic factory of Longines” did not cease to be the object.

Concern with quality was, for a great part, the cause of the slow rate at which the company developed. It had certainly been easy to make immediate profits, but Francillon saw far and was not going “to compromise the future by being com-

pelled by the present”. Jacques David had designed machines which appeared practical and robust, but each day still brought him “his quota of details, struggles and expenses”. Two or three inventive watchmakers who, with him as their leader, had developed the first calibres, sought to perfect what was perfectible, and that did not happen without mistakes.

However, all the team believed in victory and could see the first fruits of it already ... In 1873 Francillon sent watches and spare parts to the World Fair in Vienna, which were conspicuous by their identity and were worth a medal to their manufacturer. By the judicious combination of the hereditary manual skill of the Jura craftsmen with the strict precision of the machines, an uncommon uniformity was indeed obtained. The new trademark became a guarantee of good quality in the minds of the public. This birth of fame was echoed in the letters of Graner, Robert and other people, thanks to whom the sales of the small factory now extended to Germany, the northern countries of Europe, England, Canada and Spanish America.

Industrial success always creates envy and causes counterfeiting. Competitors dishonestly exploited the word “Longines” and, in January 1874, the house reacted by taking protective measures, and by publishing everywhere that all movements of its manufacture were engraved with the misused term or the winged hour glass, which has remained its poetic symbol from then until now.

*Office of ERNEST FRANCILLON,  
LONGINES WATCH COMPANY,  
ST IMIER, SWITZERLAND, JANUARY 2nd, 1874.  
NOTICE.*

*In consequence of attempts being made to imitate goods of my manufacture, I deem it proper to inform the Trade, that all Watches, and Watch Movements made in my Establishment, bear the registered Trade Mark, consisting of an hour-glass with wings, and the word “LONGINES,” either or both, and none are genuine unless so marked.*

At that time the Bienne to Saint-Imier to La Chaux-de-Fonds railway was inaugurated. Ernest Francillon had been one of the most active and resolute supporters of this development, from which the industry of Erguël could gain many advantages.

Production exceeded 15,000 pieces per annum, but that was neither enough to satisfy demand nor to make it possible for the company to remain viable. Francillon estimated that it was necessary to reach the figure of 20,000 and if, one week, only 36 cartons were finished, it caused real concern. However, he did not always get what he wanted. With David, he had to fight against the lack of concern and idleness of many of the workmen. If some devoted themselves to what their bosses called the good cause, others gave up with a disconcerting ease. They could not abandon their customs. The watchmaker who worked for an *établissement* did not have to account for his time. A certain freedom still reigned in the *comptoirs* and the small workshops of the village, and nothing was more normal than Monday blues. At the same time, the discipline of the factory seemed quite unbearable. Very valuable workers could not adapt to it and went away. Periodically opinions of the following kind were posted at Longines:

*Then there was a carelessness which grew each week, I recall that the work of the departments started and stopped with the movement of the transmission.*

In May 1874, J. Eugène Robert visited again. He was a creditor for a large amount, but the state of his business, he asserted, was going to allow him to refund it shortly and, better still, from now on to pay invoices when the goods were sent. Alas! when he returned to New York sales had ceased. Francillon did not receive the money with which he had hoped to reduce the increasingly heavy burden of his debts. And so he harassed his American agent, on the advice of his colleagues, as he suddenly faced an appalling accumulation of goods which it would be pointless to dispatch. In spite of his loathing to do it, he had to dismiss workmen and, in order not to withdraw work from the others, he made them accept a fall in wages, the quality of the work having to remain the same.

The position of the factory was of unprecedented gravity. Ernest Francillon has just experienced, if we believe him, the most painful Saint Martin's day that he was ever given to live through. To avoid a pure and simple liquidation, his only recourse was to seek new capital.

## Two Critical Years, the Investigation of Jacques David in the United States

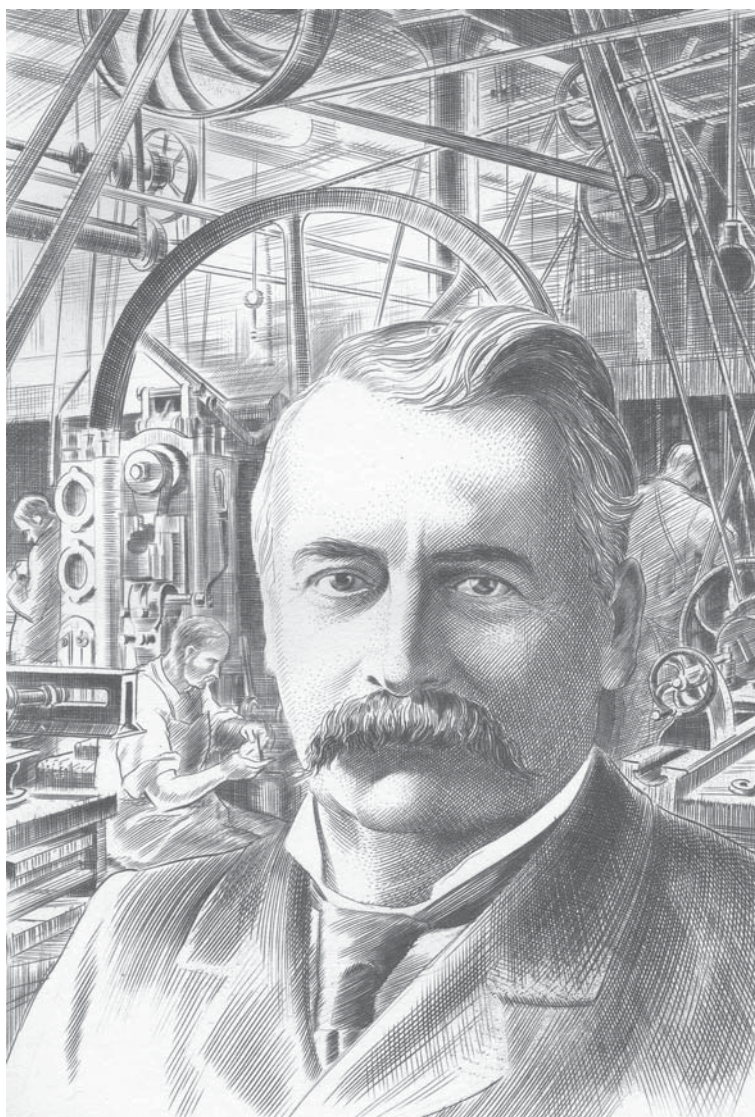
In 1875, the Swiss watch industry had too few orders and entered a perilous phase of its history. Francillon had sometimes wondered whether the future of Longines lay in the production of the unfinished movement and its sale to établissements. Finishing, the most difficult part of the work, was extremely expensive with the higher quality watches. The business of the watch industry being of great importance to La Chaux-de-Fonds, Francillon had even floated the idea to some colleagues in that “large village” of Neuchâtel.

However, at that time of need he turned to Delémont, a town almost a stranger to the craft of Jeanrichard ... It is true that he had a friend there, Albert Gobat, a lawyer who later had a notable political career and who, at that time, had set up a committee proposing to build a watch manufactory on the site of a blast furnace. On May 15, 1875, a contract was signed between this group and Francillon. The Delémontians would endeavour to form a limited company and as soon as all the shares were subscribed Francillon would transfer to it his completely equipped factory, “his trademarks, patents, calibres, customers and all his processes”. In other words, the Longines factory was to be transferred to Delémont with, it was hoped, its one hundred and twenty employees.

Jacques David was charged with preparing the plans. Albert Gobat went off to find the capital. Not being able to do without the support of the banks, he went to Basel and then Bern. But the financial institutions were sullen towards industry. That’s no problem, suggested Francillon, offering him bonds whose amount would be covered by the buildings and would be guaranteed by the town of Delémont. Alas! Delémont could not pledge the same. The project now appeared unrealizable and Francillon, impatient to finish this business which had caused many often unpleasant comments amongst his colleagues, cancelled the agreement of May 15 on September 1. What would Saint-Imier be today, if events had not taken this turning? It is no exaggeration to say that the loss of the Longines factory would have changed its destiny.

Charbonnier remained master in his house and was not unhappy. As Francillon would have had to provide part of the capital to the Delémontians, he had requested the support of his close relatives and friends. The funds that were advanced or had been promised to him, were still available even when Gobat’s project was relegated to the land of dreams.

He then decided likewise, to set up a limited company with share capital. He wrote the statutes for it after having consulted with his principal creditors, Auguste Agassiz and the Marcel bank. He would rent his factory to the company. He would be the director and give the management to David. The authorized capital would make it possible for the company “to work with only its funds and to call upon its credit with the bank only in exceptional and transitory circumstances”.



*Jacques David in the old mechanics workshop*

But the year ended and with it the term of the Agassiz partnership. The watch-making industry being in an increasingly deplorable state, some supporters withdrew or expressed less eagerness.

Ernest Francillon, who hoped to free himself from the supervision of the banks, instead had to turn over to them. Having a presentiment, the von Ernst bank in Bern, put into its agreement an unexpected condition: “the break-up of Longines”. Move your engineer and your machines to Bern, it said, labour is abundant here,

and the first phases of manufacture can be done cheaply. Sell your factory, but remain in Saint-Imier with your watchmakers; under your orders they will take care of the finishing.

At the same time, the von Ernst bank, rather than take on the risk itself, put the man of Vaud, drained of cash and in Saint-Imier, into contact with G. de May, a rich man of Bern in Zurich. This person, who worked for Messrs Escher, Wyss & Co., manufacturers of machines, was to take charge of the association and to manage the factory in Bern when the company was divided into two. Knowing “absolutely nothing about watch manufacture”, he decided it was wise to say no.

However, the revival of business seemed more remote than ever. The factory had “a miserably small amount of work”. “Its personnel could fit into a tiny room”, was his simple expression.

Ernest Francillon considered the game lost. He could do nothing more but wash his hands of the work to which he had devoted his fortune and his life for ten years. At least that is what this short letter, addressed on February 4 1876 to Auguste Agassiz, gives us to understand:

“I regret to announce to you that the current crisis and especially the state of the American market, my principal outlet, oblige me to enter into liquidation. My situation is likely to satisfy all my creditors if, as I hope, I can obtain from them a friendly liquidation and the time necessary to release me. Please meet me next Wednesday, February 9, at 3 o'clock, at my office, to examine my position and consequently to advise me.”

The tone of this note is surprising because, by all reports and in spite of some storms, uncle and nephew had held each other in regard and affection until then. What had occurred? We do not know exactly, but Jacques David saw Agassiz to be “rather impatient”. Georges did not approve of all the arrangements conceived at one time by his cousin to set up the business. He no longer had the enthusiasm for the factory that he had in the beginning. Returning to the past, he set up a comptoir in Saint-Imier under the name Agassiz Fils and he specialized in the production of pendant wound watches of good quality.

Did Ernest Francillon really consider the game lost? Did the meeting of February 9 take place? On the 16th, he announced to Robert the departure of “splendid pieces” to the International exhibition in Philadelphia. On the 29th, what was his greatest concern? To build new calibres and to augment the tools. He declared that he did not yet believe it to be the end of the world. Already his correspondence with Agassiz had become cordial again. Subject to certain reservations, his old friend continued to lend his support.

Our manufacturer again took up the negotiations which he had started in January with the important établissements of La Chaux-de-Fonds. In the guise of an introduction, he evoked a danger that many Swiss still regarded as a fable, but which was actually already the greatest threat to their industry: American competition. From 1850, the United States had given birth to several watch factories which had enormous capital and made abundant use of machines. The Swiss watch, until then, had been upheld by its quality and, in spite of customs duties, by its relatively low price. But the American purchaser soon preferred the work of his compatriots, and not without good reason. Elsewhere even, in Brazil, England and as far as Russia, the Jurassic or Genevan lépine was no longer the only watch to attract customers.

“The ordinary mechanics”, continued Francillon, “we can employ them as well as our rivals. Indeed, we have better than they have, experienced in the old ways of the watch industry, an abundant, intelligent and cheap labour force. We do not lack capital either. Our weakness is our lack of agreement and union. Far from understanding the spirit of solidarity, which should cause us to group together, we fight separately, and separately we will be beaten by the large American battalions.”

“We cannot think of setting up in our mountains powerful companies having millions of dollars and thousands of workmen. It neither suits our customs nor our interests. But what we can do is to syndicate with a common aim.”

The factory at Longines would devote all its forces to mechanical work, being restricted to produce movements. The établissements of the consortium would hand finish the watches and organize their sale. Charles E. Jacot, Jules Grandjean, Leon Gallet, Constant Girard-Perregaux, and Louis and Jules Courvoisier approved these proposals. If others saw them as “an extremely skilful way to sell very expensive things which still would not pay”, they believed in the “future value” of the factory of Saint-Imier. However, could they, in the middle of a major crisis, bring together the funds necessary to form a syndicate? It was necessary to extemporize.

On April 30 1876 in Yverdon, Francillon took part, as the representative of the Canton of Bern, in an act which marked a first step towards safeguarding and organizing of the Swiss watch industry: the foundation of the Intercantonale Society of Jura Industries. The Longines factory also played a role in the events which make the year 1876 one of the most important dates for the watch industry.

One hundred years after having proclaimed their independence, the United States opened their first World Fair in Philadelphia. It was a wonderful opportunity for old Europe to study the progress of America on the spot! Switzerland sent official delegates. Manufacturers and technicians, they could not hide their admi-

ration in the face of the masterpieces of the factories across the Atlantic, all beginners who had not long worked on them. On their return, they informed their compatriots by word and the pen. The Intercantonale Society entrusted to Jacques David an investigation into the organization and the tools of the American watch houses.

In the experiments which the factory of Longines had done, the young engineer had been an invaluable collaborator for Francillon. And let us add faithful, because he had just rejected a tempting offer. At the cost of often excessive work and much research full of risks, he had created the mechanical equipment of the factory. He had begun the study of new calibres which the house promised to launch at the time of the much awaited recovery. Thus he was all prepared to fulfil the mission which was now entrusted to him.

He embarked in Le Havre on August 13, had a pleasant crossing and entered the streets of New York on the 23rd. J. Eugène Robert welcomed him with open arms. Had he not requested and then begged his suppliers to make this voyage in order to see the evil and to seek remedies with him! He had at least four thousand Longines watches in his stores and was exhausted by the vain efforts to sell them: customers quite simply did not want Swiss watches any more, and the retailers did not hesitate to liquidate them at a loss. He had separated from Joseph Fornachon at the end of 1875 and worked with his young brothers-in-law, Albert and Louis Wittnauer.

Jacques David started by visiting the exhibition. The section of the watch industry was a mine of information. Glad to show their most successful products, the Americans had brought their sumptuous machinery and had constructed model workshops. Jacques David continued his investigations on the spot where these frightening emulators made hundreds and thousands of good watches. Also, we think, this second part of his program was more delicate than the first, especially as, inopportunately, his arrival in the United States "had been announced by great cries from everyone" ...

He was right about all the obstacles.

In November, he returned to his country.

From his notes, sketches, calculations and memories, he drew up a report for the Intercantonale Society clarifying all that made the Americans superior: the perfection of their machines, the accuracy of their work, the control methods, the comfort of the factories, the conscientiousness and discipline of their workers. The Swiss could not delay if they wanted to take control again. In his courageous talks Edouard Favre-Perret, a manufacturer from Le Locle, spread the same warning.

Consequently, the formula of manufacture tended to supplant the system of *établissage*. The Swiss watch industry was modernized, was mechanized without excess, taking from the Americans what they did best and preserving what only their long tradition could give them. Little by little they found a place in the sun.

This great work was done at Longines; it has even been shown that it was well done. The ten years of efforts, discussed by many and misunderstood by others, suddenly found their justification. Francillon wrote to Girard-Perregaux: "Mr David returned filled with wonder at what he saw, but by no means discouraged, as I had feared. He is convinced that we have wasted neither our time nor our money, by being the first to leave the trodden paths to organize our factory."

Francillon spoke again of the syndicate to his colleagues of the Neuchâtel Jura. The "Swiss Society of the Watch Industry", which had just been formed to purchase the factory in Montilier, close to Morat, proposed a tempting and at the same time complicated union with him, with which he did not agree. He still had, at the beginning of 1877, some discussions with people in La Chaux-de-Fonds but, seeing them too engaged in their own businesses, he opened talks with another group of the Mountains which also produced no results.

On 25 February 1877, Auguste Agassiz left this world. His destiny was to know the history of Longines only during the times of struggle, and only to have a presentiment of the fertile years, thanks to the patient optimism of his nephew Ernest and his friend Jacques.

## Rise

In the evening of March 6, 1877, a fire in the roof devastated the vast building in Bond Street where the American agency of the factory had its seat. The following day J. Eugène Robert temporarily moved to Broadway, thanks to the hospitality of Messrs Paillard & Co., “importers of musical boxes”. Part of his stock was lost, but as they were mainly key wound watches which had ceased to sell, and were in addition covered by insurance, he did not feel vexed and ordered pendant wound watches.

World trade revived in 1878 and Longines remained independent, having from now on some additional funds and tools without defects. The dawn of prosperity came. Each morning, a multitude of workers went from the village, crossed the small bridge over the Suze and found their ancestral labour. Until evening the rustle of the lathes, cutting and drilling machines resounded in the workshops, punctuated now and then by the dull blows of the presses, and often drowned out by the melancholic or merry songs of the workers.

That year Paris organized a new international exhibition. One hundred and forty six Swiss watch houses gave proof of their vitality. Nine of them accepted gold medals, the highest award. The factory in Saint-Imier was one of them.

In December, Ernest Francillon completed his accounts and was, for the first time since the foundation of the factory, in profit by an amount worthy of that word. No longer could anyone claim that he ran to ruin and that his efforts and those of his colleagues had been in vain. His company was viable. Addressing himself to his cousin Rose, who had continued the partnership of Auguste Agassiz with her sister and her brother, he wrote: “I am satisfied with this result which inaugurates a new era for Longines and I have only one regret: that it was not given to me to achieve this during the life of your excellent father.”

From that time his house developed considerably. Year after year he made conquests in new markets. A Swiss wholesaler was sometimes used as an intermediary, but generally he stuck to a representative living in the foreign country. At a distance, the choice was not easy. Soon, however, in all Europe, Africa and the three Americas, he was assisted by active and enthusiastic agents, who had a good share in his rise.

In Austria, he had been forced to replace Alex Graner, who had made some bad deals and was no longer able to keep up with the competition. J. Eugène Robert, on the other hand, having slowly recovered from the poor situation in which he had been placed during the crisis, extinguished the debt which he had

contracted with his supplier. In July 1879, after handing full power to Albert Wittnauer, he remained in Switzerland and signed a new contract by which he was committed to paying invoices in cash and “to develop the consumption of Longines watches in the American market and to take at least 12,000 pieces per annum”. “I agree”, promised Francillon, to give you all possible discounts compatible with the good quality which the Longines watch must preserve.”

Here is the beginning of an interesting evolution, desired for a long time by Francillon and on a par with the industrial metamorphosis of 1866: the expensive method of consignment ended; the New York house ceased being simply the agent of the Jurassic manufacturer and became autonomous.

The disgrace incurred by the Swiss watch in America was no more than a bad memory. Gaining the regard of an increasingly large public, Longines sold well. Robert even complained that the deliveries were too few. In the other markets demand was also keen and the prospects enticing. The factory had to produce more. Full to the brim, it was necessary to enlarge it without delay.

The work started after winter in 1879 and lasted several years. Jacques David directed it and benefited from the circumstances to perfect the fitting out of the workshops. It began by adding a wing on the east side of the original buildings, raising the whole by an extra floor and increasing the capacity of the dam which fed one of the turbines. The reader remembers that two hydraulic engines actuated the transmissions; afterwards they were reinforced by a steam engine. In 1880 a workshop devoted to the machining of silver cases was set up. Its first head was Emmanuel Joerin.

The house then took part in the World Fair in Melbourne: its fame reached the antipodes from Switzerland. Construction continued three years later when an annex was put up which was so massive that, because of its square form, it was baptized the Pavilion. The factory took on the appearance which it was to preserve until the end of the century; imposing and rather severe, were it not for the front-ages where the timber joists of the frames combined curiously with the masonry. Then a painting was commissioned showing the factory and the Chasseral mountains, and many reproductions were made and sent to agents in the country and abroad to be used as publicity.

In July 1880, a circular announced to the suppliers and customers of the house that Ernest Francillon and Jacques David had just entered into a partnership. On September 24 a signed document sanctioned their decision. “The Longines factory has”, it says, “been considerably enlarged and developed since its creation, especially since Mr David was employed there in the capacity of engineer. In rec-

ognition of the long and honest service of Mr David, Mr Francillon offers to him an interest in his establishment.” The duration of the partnership was fixed at six years backdated to 23 April 1880. “The contribution of Mr Francillon consists of his Longines establishment”, but he kept ownership of the property. “The contribution of Mr David is only his work and his industry.” From that an inequality in the division of profits and losses arose. The Agassiz partnership remained in force. The company would, as in the past, belong to Ernest Francillon, “because of the connections established by Mr Francillon as founder of the establishment”.

The number of workers increased gradually to four hundred and the work of factory became routine. Great advantages came from this, even if one regretted the passing of the old Bohemian ways. For the rest, the cordiality which ruled the late comptoir and the rapport between the heads and the watchmakers, remained the rule in the Longines factory. The owners could temper their firmness with a deal of benevolence. Their relationships with customers - one will undoubtedly have realized already - were also founded on friendship, confidence and regard. Will I be contradicted if I say that the same applies today? It is true, isn't it, that this is far from all that is suggestive of inhuman in the words “trade” and “industry”!

The increase in personnel naturally caused an enlarging of the executive. To discharge them from part of their responsibilities, which fell increasingly heavily on them, shortly after Christmas in 1881 Francillon and David promoted Baptiste Savoye. That amounted to formalising an established fact, because for a long time this knowledgeable and trusted colleague had held the rudder in times of need. The house then took on two new employees in the commercial office: Benjamin Augsburger and Robert Beuret. To assist the engineer it appointed a technician, Henri Gerber. And, as they were already educated in American methods, it was judged useful to find out what England did, where the art of the watchmaker had always been held in honour. One morning in January 1880 Francillon left for that country with Henri Gerber to meet a Liverpool manufacturer.

What were the watches carrying the Longines trademark during this time of happiness? The key wound watch had been dethroned by the pendant wound watch; extremely fortunately, Edouard Savoye had arrived in 1876 and made the remainder of the unwanted movements usable by transforming one of the principal key wound calibres to pendant wound. A little later he converted a lépine of solid structure to a right-angle lever, which then had a long and happy life on both sides of the Atlantic. J. Eugène Robert tirelessly repeated: “please do not neglect to send to me as many 18L as you can in your next shipment.” Or: “I have had only one 18L in stock for ten days.” But an industry cannot, under penalty of death,

ignore the diversity of tastes and the whims of fashion, and Longines quickly extended the range of its products. In 1879 it ventured into the construction of a chronograph based on the design of H. A. Luğrin, an inventor originally from Vaud who was appointed by Robert. To adapt such a new and complicated measuring instrument to machine manufacture was a real gamble and the victory caused much trouble.

Following the wonderful example of his uncle Agassiz, Ernest Francillon gave generously for the public benefit. The railroad which served the Suze valley was partly his work. Often he put his financial talents at the service of the village whose prosperity grew thanks to the activity of his factory. In 1881 Saint-Imier made him an honorary citizen. It could have been an end, but it was a starting point. Indeed, a few months later he was elected a deputy to the National Council and was for nine years to play a leading role in the development of industrial laws and commercial treaties.

In January 1883, to put itself in harmony with the federal code of obligations which had come into force, the factory took the name Ernest Francillon & Company. From the legal point of view it was a limited partnership from now on.

The house in New York had bad news in 1884; its business slowed down markedly. But the factory had an insurance against this risk: as in the beginning it did not intend to rely on the United States for the great majority of its sales. Thanks to its other outlets, it experienced only a short time of poor sales in the summer 1885, and one adjustment of its prices. Then the Antwerp World Fair took place, where the company obtained a diploma of honour.

In April 1886, the partnership with Agassiz was paid out and again the house legally became a joint association. Their contract arriving at the end of its term, Francillon and David renewed it.

“Our trademark should only appear on irreproachable goods; it is to our honour and in our interest that all who know it increasingly respect it.” Thus one day Francillon spoke in an address to the workmen. Only once did the factory produce a very cheap article. It quickly understood that it had erred and returned to the principle, which was for Longines to make only watches of quality. Over time it had attracted a team of conscientious and devoted watchmakers. The schoolboys whose fathers worked at Longines were proud of it in front of their comrades ... From 1888, the company dedicated part of its forces to high precision adjustment. For this purpose it engaged a specialist, Arnold Vuille. Jacques David had formulated for him a revealing work programme to achieve progress without the risk of vain precipitation, and of which we give the two principal articles:

“Active participation in the study of the best proportions to choose for the train, balance, balance spring and mainspring for the creation of a chronometer. This participation will be able to take place only when the adjuster has studied the proportions used in Longines watches most similar to this new calibre, proportions which will only be modified with care and when the need for change is proven.”

“The introduction to Longines of improvements not only in fine adjustment but also in ordinary adjustment.”

The first Longines chronometers were subjected to the tests which the Neuchâtel Observatory had instituted in order to stimulate the industry. The results gave joy and helped to officially reinforce the reputation for accuracy which the trademark had achieved.

In 1889 there was a new exhibition in the City of Light (Paris). For the factory, this event translated once more into success, which this time was the “grand prize”.

J. Eugène Robert and Albert Wittnauer had become partners in 1885. Robert, thinking of leaving the business, left the direction more and more to Wittnauer. On March 1, 1890 the man who had always been a persevering and courageous associate of the factory, transferred the business to his colleague, who had matured with his experience in trading, was an expert in the watch industry and also came from a Neuchâtel family. Albert Wittnauer made his brother Louis the manager.

In Longines, the son of Ernest Francillon took arms for the first time<sup>4</sup>. His name was Ernest-Etienne and he was the same age as the factory. He had gained his diploma from the School of Horology and had learned the practice of the trade abroad. He was hired for his zeal and his intelligence, and from June 1891 he acted as a manager.

The telephone, typewriter and electric light changed customs. The duration of daily work was reduced from eleven hours to ten: production did not suffer, everyone making better use of their time. The manufacturer of Saint-Imier and other Swiss houses decided to register for the 1893 World Fair in Chicago. And it was a good thing they did, because Chicago was something of a revenge for Philadelphia and, in their turn, the Americans did not believe their eyes. The *Waltham News* wrote: “the progress made by the Swiss in watch making is absolutely astounding.”

Longines penetrated the five continents. As far as the ends of the Earth, their watches were seen marking the seconds and, on a whim, were sometimes opened to admire the brilliant, pretty and perfect parts.

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<sup>4</sup> Became an adult, an event marked by commencing national service.

## The Private Company

Arriving at political unity, Germany gave its industry a very sharp impulse. If old Leipzig and her famous fairs grew blurred in the mists of the past, Berlin became an increasingly animated business centre. The Swiss watch industry made its mark there. Only the Longines factory, less well supported than in other markets, was an exception. To believe what was written at this time, the trademark had been seriously discredited. Ernest-Etienne Francillon, who often traversed this country from end to end talking with the merchants, saw this situation worsening in a worrying way.



*Ernest-Etienne Francillon*

For great evils, great remedies. On April 1, 1894, the company of Saint-Imier opened a branch in its name, on Jerusalemstrasse in the heart of Berlin, and put at its head an old but excellent salesman, Carl Doebel, whom Ernest-Etienne helped at times. The system cost a lot; the lessons of New York had not been forgotten, but was there a choice? Doebel's first mission was to sell as much for Longines as possible. However, the factory provided him with watches of a lower quality, bought everywhere and intended more "to reduce the expenses of the house and transport" than to gain customers.

Ernest Francillon was sixty years old and dreamt of the future. One day he would be no more. One day, Jacques David, who approached fifty, also ... However, the orders continued flowing in from the four corners of the world; a hive of activity continued to depend on hundreds of families. The modest framework of the partnership no longer seemed appropriate for the size of the business. And nothing inhibits new developments more, not even a depression which once again afflicted the watch industry rather badly.

It is for these reasons that on July 1, 1895, the business was transformed into a private company with share capital. "At two in the afternoon", Ernest Francillon received the subscribers in his residence; in the house where, thirty years earlier, the *établissement* had decided to become a manufacturer, not envisaging either the number of difficulties or the extent of success. As well as the three associates (because Ernest-Etienne Francillon had recently joined his father and David) there were, present or represented, their colleagues, friends and bankers. Baptiste Savoye, one of the first managers; Max Weidemann, a mechanic from the pioneering days; the technician Henri Gerber; Edouard Savoye, who left the factory after a long career; and Louis Gagnebin, of whom we will speak shortly. The friends were Dr Samuel Schwab, the manufacturer Emile Blancpain of Villeret and the trader Jean Aeschlimann. Messrs von Ernst & Co., bankers in Bern, were represented by their delegate Auguste Bécheraz.

During the meeting, the company acquired the factory. It took over the old business and fixed the duration of its existence at thirty years. It reserved the right to change into a *Société Anonyme* (a public company). Ernest Francillon, Jacques David and Ernest-Etienne Francillon receive the title of "responsible managers, in perpetuity". The "board of trustees", prescribed by law, included Bécheraz, the president, Blancpain and Aeschlimann. Baptiste Savoye had his position confirmed.

The Swiss watch industry again became extremely active. All along the arc of the Jura, of which Geneva and Schaffhouse marked the limits, output increased at

a rapid pace. In 1896 more than five million watches crossed the borders. There were enormous demands, but in the majority of markets competition forced a fall in prices. Earning less, the industrialists tried again to increase quantity. The Longines factory coped with this trend, being better armed for the fight; to produce increasing amounts seems to have been its watchword in the two decades which followed the events of July 1895.

Once again the power source was inadequate for its task. They had recourse to the combined services of water and steam. Only electricity was missing; the communal power supply was used. The capital for this other source of energy was also insufficient and the general assembly provided 1,000,000 to 1,200,000 francs in 1896. The circle of shareholders widened, including some suppliers and customers "whose fidelity", we read in a report, "was mixed with personal affection".

The rise of Longines and other establishments which had been founded in Saint-Imier, caused this locality to lose its rural nature and gave it the proportions of a city. All of its comptoirs disappeared, one after the other. Such was the fate of that which had been set up by Louis Gagnebin with his father, a son-in-law of Ernest Francillon. This man, a specialist as regards finance, had for ten years given part of his time to the factory. He moved there for good on March 3, 1896, at the age of 49, and took control of the finance office and accounting. Two years later he was made a manager.

On June 5, 1896, Alfred Pfister came in his turn to reinforce the executives of the house. He was the son of a manufacturer in Le Locle originating from Zurich. He was not twenty-two years old when, after having successively studied at the School of Horology in Le Locle, with a toolmaker in Montilier and with a technician in Bassecourt, he arrived at Longines. At once he proved himself valuable by designing a calibre measuring 9 lignes and using a lever escapement as the rules of the house required.

This rather risky development succeeded extremely well. The factory had already launched a movement of 11½ lignes in 1893. Thus, after production of the pocket watch had ceased, it could provide its customers with two small, pretty pieces that elegant people carried in their breast pockets, unless they preferred the wrist-watch as was then the case in England. In London, Lima, Tokyo, everywhere the word Longines was added to the female vocabulary.

The house was not allowed to compete at the 1896 National Exhibition in Geneva, Jacques David being on the jury. The following year, it won the grand prize at the International Exhibition in Brussels.

The notices that were displayed on placards in the workshops and offices reflect the concerns and joys of the moment. That posted on July 15, 1897 was certainly a wonderful surprise for everyone. It read:

*On the forthcoming occasion of the marriage  
of my son, I am pleased to invite all the personnel  
of Longines to a modest festival which will take  
place next Tuesday July 20 at the Casino.*

*Program.*

*7:30 pm: Supper.*

*Music, various events, dances.*

*Midnight: Close.*

*Francillon.*

The rejoicing of four hundred and fifty workers from the one factory, sharing the happiness of the couple with the family, took place in a charming environment.

Prosperity continued and deliveries did not keep up with orders. "Although we pushed production to extremities, we remained in arrears of demands and December surprised us with a long delay. The uncontested position that our articles occupy in the market gives us hope for the maintenance of our current sales turnover, and even its expansion during this time of great activity. However, our buildings, suitable for a regular production of 60,000 pieces per annum, are completely insufficient if we want to exceed this figure. The moment has come to enlarge." That was the opinion of the managers, and they had no trouble convincing the shareholders. In 1899 a freestone annex was built to the south of the old buildings and was connected to them by a covered footbridge. The pivoters occupied the ground floor to which they gave, undoubtedly by allusion to Dreyfus, the rather unexpected name of the Isle of the Devil.

Auguste Bécheraz, a member of the board of trustees, handed in his resignation and was replaced by Albert Grether, a notary in Courtelary. The presidential functions passed to Emile Blancpain.

Francillon had no doubt that his son, to whom Nature had not been miserly with her gifts, would follow in his steps. But Providence thought differently. Called to take a "refresher course", on 25 August 1899 Ernest-Etienne earned his uniform of first lieutenant of artillery. On the 26th, he went to acquire a horse from the arsenal at the station in Tavannes. A dog passed by. His mount reared. The young officer fell and sustained head injuries. He died a few moments later.

Baptiste Savoye took over the work of the deceased and gave to Henri Gerber "a gold watch in recognition of long service to the company". For the visits of foreign customers, management resorted to the good offices of Blancpain.

In the summer the newspapers announced the departure of Italian explorers who would try to conquer the North Pole. In the Arctic emptiness, as on the open sea, longitude cannot be established without the assistance of a chronometer. The Duke of Abruzzi, leader of the expedition, carried six Longines pocket chronometers, whose rate had been regulated at the temperature of twenty degrees below zero by means of special instruments. He took his ship to Prince Rodolphe Island, but an accident prevented him from continuing the adventure himself. Lieutenant commander Cañni and some companions set out to the North with sledges and dogs. They arrived at the highest latitude ever reached, 86° 34'.

The chronometers kept a wonderful accuracy in spite of the jolts of a harsh journey, and in spite of the changes of temperature which they faced every time they were drawn from the pocket into the open air to be consulted. The official work of scientific observations was carried out by these explorers with great care.

The death of his son had been a terrible blow for Ernest Francillon. But, faithful to himself, he had gone back to the task. He died in his turn on Tuesday April 3, 1900, at six o'clock in the evening, after a short illness. The same day, the frame of the trip hammer, which had been used since 1867 to harden brass plates, split irreparably.

"The day of the funeral" to quote the words of Pierre César, Francillon's biographer, "was a day of public mourning for the village of Saint-Imier. The spectacle, of infinite sadness, was none the less comforting. Along the crowded streets, the shops being closed, the coffin advanced to the music of Chopin's funeral march. Had he not made the same journey on other occasions to accompany friends to their last resting place! And he went the same way in his turn, while the whole population, which loved him and more than once had given proof of its love, looked on damp eyed, and followed the sad procession at the end of which was the open grave."

"After a life of struggles, hopes, disillusionments and triumphs, Ernest Francillon entered the history of our country, leaving a monument to his tireless work and his memory, and from then on the people would surround him with a deep and glorious veneration."

# A Happy Time

From April 20, 1900, the company had as managers Jacques David, Baptiste Savoye and Louis Gagnébin, in charge of manufacture, trade and finances. Mrs Ida Francillon also belonged to management, but did not play an active role; she morally represented the absent leader. The corporate name changed and was from then on Longines, Francillon & Company.

In 1900, which will remain the epitome of a happy and accomplished period, there were two events with different effects on the life of the factory, the Paris Exhibition and the "Cantonal Shooting" in Saint-Imier. Switzerland had built a monumental chalet at the foot of the Eiffel tower and showed, in the palaces which lined the Esplanade des Invalids, the quintessence of its industrial achievements. Crowds stopped in front of the windows of the watch industry, glowing with fine stones, gold and silver. About the middle of summer, the managers of the Longines factory announced to their workers that the grand prize had just been awarded to the house, and that they saw in it "just recognition" of the efforts of each and every one. As for the representatives, they learned the news by means of an advertising plaque, on which the factory was described in text and image, and the successes of the trademark were enumerated.

The importance of shooting festivals to Swiss life is well known. Already there were many winners of these popular tournaments to whom a Longines watch had been given as the prize. At the Canton of Bern Shooting, which was held in Saint-Imier in the first week of July, this pretty reward stimulated the virtuosos of the rifle again. And all during the festival the factory remained closed.

Little by little, the house re-established itself in Germany. In the other markets, in spite of falling prices, it did excellent business. The sums which the tax department claimed would seem ridiculous today ... The factory was besieged by orders. Its records simply do not mention the crisis which burst in 1902 and the effect of which was especially felt in La Chaux-de-Fonds, which remained faithful to the system of *établissage* longer than Ergüel.

By the size of its buildings, by the prestige which surrounded it, Longines exerted a strong attraction on the young people of Saint-Imier. Maurice Savoye, son of Baptiste, experienced it when his time came to choose a career. At the School of Horology he was initiated into the beautiful trade in which his grandfather had worked. He studied with his father in Berlin, in the office of Doebel and at a commercial school, and then in London in an import/export firm. On October 16,

1902, at the age of twenty-one, he entered the factory where, from the start, he worked with happiness on important tasks.

The Longines movements of the last century were characterized by their solidity. At the beginning of 20th century aesthetics ruled. Taking as a starting point the Genevan styles, Alfred Pfister and his collaborators designed, in all sizes from 8 to 24 lignes, elegant calibres with serpentine bridges. In particular, an extra-thin lépine based on this model deserves attention, because it created a stir in the watch making world.

Many people declared the machine incapable of the prowess reserved to a small number of workmen. But no! Increasingly sophisticated, the tools of the factory achieved a finesse comparable with the skill of the best artists. Customers delighted in the news from Longines of a movement that was only 3.8 millimetres thick. A fashion was launched; or rather resuscitated, because about 1850 établissements had already made many extra-thin watches.

In 1904 in New York, A. Wittnauer Co. was formed as an incorporated company, the destiny of which the brothers Albert and Emile Wittnauer oversaw. The field of activity of this house had expanded beyond the borders of the United States and it had opened an office in Montreal, selling Longines watches in the large cities of the Dominion.

Like the Duke of Abruzzi, Captain Bernier, a Canadian explorer, relied on the precision of chronometers from Saint-Imier. On leaving Quebec in August 1904, he regulated two of these watches to Greenwich time and did not touch them again, except to wind them, during an expedition which lasted until the autumn of 1905. "During 429 days", he wrote, "one varied 13 seconds and the other only 4."

We will remember that the factory had deposited its first chronometers at the Neuchâtel Observatory. However, being located in territory belonging to Bern, it could not enter the annual competitions and had to be satisfied with a "bulletin de marche" when examination had warranted it. An intercantonal convention dated 1905 removed this obstacle. It was for the house and its adjusters, Arnold Vuille and Hans Wehrli, the occasion to destroy a long held prejudice, that chronometry was still (as was, at one time, the manufacture of the thin watches) a field from which the mechanical watch industry was excluded.

When will the development of the company be completed? Won't we see an end to this remarkable crescendo? It is not to the managers that these questions should be asked, the future appearing so rich with promises to them. Listen to them! The number of workmen rose to eight hundred, but that was not possible

without “renting buildings downtown”. Then: “Our annual production went in ten years from 39,000 to 122,000 pieces; it has thus more than tripled and still we cannot, in 1904, satisfy our customers completely: orders accepted at the end of the year were carried over to 1905.” So it was necessary “to determine the means of producing still more”. Jacques David investigated a construction program. Architects surveyed banks of Suze. And digging began.

The work is difficult this time, on left bank in very unstable ground. The foundations had to be massive and, like the fir trees of Erguël, firmly rooted in the ground. With its clear, high frontages, its pinnacle and, gleaming in the sky, the allegorical hour glass with two wings, the new building is, even today, the first which attracts attention. Extremely fortunately it hides the charmless masonry which also goes back to 1905 and which has never lost its nickname of the Fortress.

Though they proclaimed themselves to “seriously guard against the temptation of building too large”, so strong was the temptation “when one is in the process of building and one is presented with the suggestions of the architect combined with the credit of the business”, the managers did not stop with that vigorous dash: with the assent of the shareholders, in 1906, the year of the World Fair in Milan, they extended the main building on the east side.

And that is how the factory doubled!

## Other Adventures

Wishing the name Francillon to continue to be connected with the future life of the company, in 1901 the management invited a nephew of the founder to leave his town of Lausanne and settle in Saint-Imier. He was Adrien Francillon and had finished his schooling; he had studied horology, trade and foreign languages. On January 7, 1907, after having spent nearly a year in London with suppliers to his parents, the iron traders of whom we spoke, he began a fertile career with the factory.

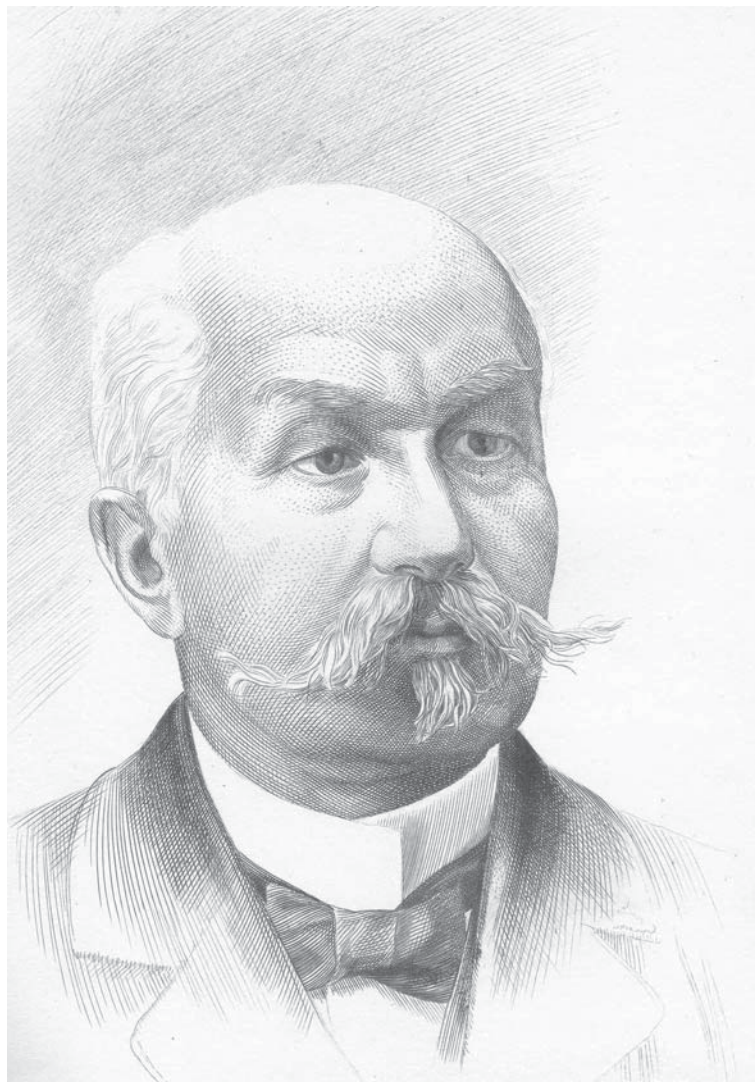
A financial panic burst in New York in October and started a world-wide crisis which lasted a good two years. The Longines factory reduced the hours of its workers, but this trial was made less painful thanks to a relief fund that it had, by tradition, maintained. Its American agents, whose business had developed as the deliveries of the factory increased, also had hard times. Embarrassed by an excess of stock, they requested the help of the banks in vain. The industry in that country carried out a violent press campaign against the Swiss watch. Albert Wittnauer died in March 1908 and his brother Emile had the difficult task of coping with the situation.

At that time the factory increased its publicity expenses considerably. This was due to the strong competition which it met everywhere. "The trumpet should be sounded", said its heads, "and it is the one who blows the loudest who will attract the public." The customers coming to Saint-Imier may have something to say about the shape of a case or aspects of decoration, but in essence it will be for them a discussion nourished on the basis of advertisements.

The house shared the expenditure which was made to advertise the trademark. It published booklets and catalogues in all languages. It made a statue of the famous goddess, printed her image on thousands of posters and postcards, and distributed them to proclaim to the whole world the superiority of Longines. The boxes of watches, which were conveyed to the post office each Saturday, were stuffed with note pads and pen-knives, pocket mirrors and fans, calendars and napkin rings.

The German branch re-established the attachment of customers to the trademark, but it became a heavy burden for the head office. Doebel concentrated all his efforts on sales and worried little about payments. Louis Gagnebin and Maurice Savoye, who inspected his office regularly, noted that, far from decreasing, the overdraft swelled. However, in May 1910 Doebel suddenly died. Maurice Savoye, having been a manager at the factory for a year, spent some time in Berlin with the

task of liquidating the business in progress and reorganizing the branch. Two new managers were then selected: Paul Bauermeister, a traveller that Carl Doebel had formerly engaged, and Paul Germiquet, in charge of correspondence with the factory.



*Louis Gagnébin*

The spirit of solidarity which had given rise to the Intercantonale Society of Jura Industries continued to develop. The owners joined together under various names and this trend to unionism propagated to the workmen. But divergence of interests often put one in opposition to the other. Thus, in second half of 1910 Longines was the theatre of a serious conflict.

It had just won an order for 8,000 watches from the railway administration in Italy and prepared to set up a workshop, when the trade union of horological workers of Saint-Imier presented a demand which the company could not accept. The trade union wanted seven specialist watchmakers to join, watchmakers who

had signed contracts which forbade union membership. On the refusal of both the house and the seven watchmakers, the four hundred union members at the factory went on strike. A great nervousness seized the population. Meeting followed meeting. Attempts at conciliation failed. The association to which the factory belonged decided to lock out the union members.

Five weeks after the beginning of the strike, the two parties finally reached agreement: the trade union renounced the use of coercion and the factory removed from its contracts any clause forbidding a watchmaker who was not an examiner to join the trade union. The affair was commented on by newspapers in Switzerland and abroad.

It was time to restart work, at a moment favourable for the servants of Mercury, and reassure anxious customers about the delays in deliveries. The wrist watch enjoyed increasing favour and opened a broad field of activity in the industry. Then the practical instrument that a man could consult in all circumstances, the watch, became a jewel for women, an extremely becoming jewel generally held by a pin or a chain and whose gold case carried a skilfully engraved monogram or was set with diamonds, pearls and emeralds. Fixed at the wrist by a metal bracelet or a simple ribbon, the jewel remained a jewel for some, but for the majority it became a helpful fashion, a useful object which they had lacked.

Quickly Longines expanded its production of small watches in preference to the large. It was also a step towards the refinement of its labour and machines. Success with respect to quantity is never final, but Longines aimed for a qualitative victory so much so that at that time everyone was worn out by the research into rating. "The large timepiece", noted the managers, "is manufactured everywhere so easily and at not very remunerative prices, that we cannot advantageously fight the competition."

Already strongly committed in Germany, in February 1912 the company had to immobilize new capital to safeguard its interests in four other countries. The partnership Pérusset & Didisheim, which had succeeded a firm with a long relationship with the factory, sent the Longines watch from Geneva to Brazil, Uruguay, the Argentine republic and more recently to France. However, in a double blow it had just lost its two heads and was threatened with closure. Long negotiations led to the setting up, under the same name, of a limited company whose board of directors was chaired by Maurice Savoye.

The factory had sufficient reserves to briskly support what, in other times, had been called a sacrifice. It made excellent deals. At the Neuchâtel competitions it won prizes year after year with increasingly precise chronometers. In 1912 at the

Naval Observatory in Washington, where the tests were even more rigorous, it occupied the first two places. Supported by such arguments, its advertisements bore unexpected fruit. It accelerated the rate of production in vain: again it was impossible to satisfy all the orders which it received, and its representatives saw themselves applying to suppliers less burdened.

The man to whom Longines was indebted for a very large share of its universal fame, the scientist whose ever alert mind had worked to greatly improve the delicate machinery and the methodical organization of the workshops, died on 12 September 1912, surrounded by the respect which the uprightness and simplicity of his character elicited. Saint-Imier lost one of her brightest and most active citizens, and country a useful servant. Jacques David had indeed, like Francillon his fellow traveller, fought to unite the forces whose antagonism had harmed the general interest and was on the committee of the Swiss Chamber of Horology, heir of the Intercantonale Society of Jura Industries.

The place which he occupied in management was not left vacant. Alfred Pfister, who had been named head of supplies in March 28 of the same year, took control of the engineering department. From October 25 he had a new collaborator, Charles Morel.

Educated at the Saint-Imier School of Horology and the "Technicum" in Winterthur, Charles Morel then worked in various factories in the United States, sometimes as a watchmaker and sometimes as a machine draughtsman. In spite of the length of his peregrinations, Longines had never ceased to be his goal. A double affinity bound him to this house since he was, through his mother, the grandson of Ernest Francillon and, through his father, descended from Florian Morel, associate of Auguste Agassiz.

There are few human activities on which time does not impose its laws. Some even require an extremely rigorous control of the hour and its smallest fractions, and to them horological science deployed its inventive faculties. The factory of Saint-Imier brought out several new pieces. Some were to become aviation watches. Others were, at the time of which we speak, its electrically controlled chronographs for sport. In races for bobs, horses and cars, times were measured with a certainty previously unknown.

After a long period without clouds, the sky darkened again, little by little. "What will the future hold?" wondered the managers, taking stock in April 1913. "The forecasts are far from optimistic, and it is not without apprehension that we see the confusion in consequence of the war in Turkey. The diplomatic web has tangled, the world is irritated, claims emerge on all sides and calm yields to feverish

agitation. Everyone prepares for the worst.” Even though the worst did not occur in 1913, markets closed and economies turned in on themselves.

A few months after the death of Mrs Ida Francillon, which occurred on December 24 of that year, the shareholders resolved to give the factory the form of a public company. It had reached such a size that we have difficulty recognising in it the factory of the first years of the private company! Were not a sales turnover quadrupled, a thousand workmen instead of four hundred, diversification, the need to advertise, a management morally discharged (after substantial changes) from its “unlimited responsibility”, enough reasons to widen and consolidate the structure of the company? Louis Gagnebin harnessed himself to this task.

It was spring and the peasants worked hard in the surrounding fields. Once more they saw masons working on the vast buildings beside the Suze. At times dynamite explosions drowned out the buzz of the factory and the song of the water. White walls emerged to the west of the Pavilion, skirting the channel for seventy meters. It was spring, and the house took part in two new exhibitions in the cities of Bern and Genoa ... But summer brought the tragic event that everyone feared. The public deserted the exhibitions. The masons left their construction unfinished. The mobilization of the army created many empty places at the benches. Business stopped, money became scarce and the factory suspended its consignments. Office staff and workmen were unemployed in the afternoon and had to be satisfied with half-wages. All sorts of concerns badgered the owners.

Louis Gagnebin prepared the statutes of the future company. Though his health had deteriorated for a long time, he continued this labour with zeal and conscientiousness. On Saturday December 19 he was in his office as usual when the first symptoms of a haemorrhage appeared, a haemorrhage which was to carry him off the following day.

His son-in-law, Joe Gagnebin, who had worked at his side since 1911, became in his turn head of finance. Only one manager remained: Baptiste Savoye.

# The Société Anonyme

On Tuesday April 27, 1915 at two o'clock in the afternoon, Emile Blancpain, the president of the "board of trustees", proclaimed open the last general meeting of the private company. Baptiste Savoye gave the history of the factory, paid homage to the departed heads and then outlined the salient facts and the results of past performance. After the necessary voting, the meeting pronounced the winding-up of the company founded in 1895.

The king is dead, long live the king! Blancpain opened, at half past three, the first general meeting of a new company. Indeed, metamorphosed into subscribers, the former shareholders decide "unanimously and without discussion the creation between them of a limited company under the corporate name of Fabrique des Longines, Francillon & Co., S.A. The initial capital consists of the existing share capital of 1,200,000 francs in old transformed shares, and 1,200,000 francs in new registered shares created in favour of the shareholders in proportion to their respective rights." It is also comprised of assets of about an equal amount. In other words, the business will run on a sum four times larger than in the past. The statutes are adopted "after rectification of small typographical errors". They set the duration of the company as "unspecified" and place at its head "a board of directors of five to nine members chosen from the shareholders and appointed by the general meeting for six years".

Who are the elected officials of 1915? Baptiste Savoye and Jean Aeschlimann, who assume the presidency and the vice-presidency; Gustave Miche, successor of Grether who was on the former board of trustees and, like him, notary at Courtelary; the Lausanne merchant Eugène Francillon, brother of Ernest and father of Adrien; and finally, Maurice Savoye. As for Blancpain, whose great competence and handling of foreign relations had many times been so useful for the house, he had declined when asked to join the new board. Before five o'clock the meeting closed. The spirit which had never ceased reigning, shining like a white light in the middle of a storm, lit the way to the future.

The board of directors entrusted to Baptiste Savoye the general direction of the factory, then named his son as sales manager and Alfred Pfister as technical director. Three employees were promoted on the basis of their capacities. They were Adrien Francillon especially responsible "for the carrying out of orders and their good execution", Joe Gagnebin to control finance, and Charles Morel, whose tasks related primarily to the machinery, trademarks and patents.

The building that had been started was finished that year. There the factory has its most pleasant and most roomy workshops and it has taken on the appearance by which it is known today. From this time it drew all its motive power from electricity.



*Baptiste Savoye*

The legal transformation of the company of Saint-Imier involved the Berlin agency. German laws prescribed expensive formalities for a branch of a public company and thus it was better to open a separate business. With Paul Bauermeister and Paul Tapernoux (who had succeeded Germinet), on February 21, 1916 Longines set up, under the title Uhren-Fabrik Longines G.m.b.H., a limited liability company over which it had control. But Bauermeister was mobilized and, although he was always in the capital, he could seldom sit down at his desk. To replace him, Eugène Jeanrenaud, a young employee who had entered the office of the factory in

May 1911, left the banks of the Suze for those of the Sprée. Germany, in spite of hostilities, still consumed a large number of Swiss watches. However, after having been fond of gold delicacies, its preference changed more and more to accurate timepieces.

It was fifty years since the factory had been founded. This anniversary, which circumstances prevented being celebrated, was marked by the introduction of the “jubilee fund” which was set up with 100,000 francs to help families that the death of a workman or an employee left in the need. It was the first social work of this importance in Longines. The older funds were subsequently joined together in a “retirement and relief fund”. The mechanic Max Weidemann was the last witness from that spring of long ago, when a small team of workers placed rough brass plates on a water turbine, sure in the knowledge of their trade, full of hope and dreams. In April 1917 at Mont-Soleil, he celebrated 50 years of work with his comrades.

To fight unemployment the house manufactured compasses. Without harming the interests of its trademark, because munitions were not involved, and without harming its regular production, labour and machines adapted easily to the new article; in addition to a significant fraction of its personnel it occupied many workmen in a factory in Geneva. The company delivered a prismatic compass to England and a sight compass to the United States. It was not its only extra-watch-making activity. Its technicians also drew up plans for an electricity meter, samples of which were finished in 1917 and carried the trademark “Chasseral”.

Moreover, in spite of the obstacles facing trade, in spite of a fall in income and a rise in wages and costs, watches flowed normally onto the majority of markets. An importation syndicate for the Swiss watch industry, that Baptiste Savoye chaired, took care of the raw material supply. Unemployment disappeared. It disappeared to such an extent that, in the last years of the war, the plant managers faced a “completely unexpected abundance of orders” and feared they would not be able to satisfy them “for as long as the mobilization of the Swiss army periodically takes away our workmen and employees, and the munitions companies keep their personnel from this industry”.

Attracted by other business and having perhaps too much imagination to continue keeping the accounts of the house, Joe Gagnebin expressed the desire to leave. Baptiste Savoye proposed to the board to replace him with his nephew Julien Meyrat, who was a sub-manager in a bank in Montreux. Arriving in December 1917, on New Year's day Julien Meyrat was given the position. The board had consisted of six members since the election, in 1916, of Dr. Jacques-Theophilus

David, son of the engineer. In 1918, the shareholders changed its number to nine, choosing to this end Alfred Pfister, Joe Gagnebin and Charles Morel.

The influenza epidemic which broke out in Europe disorganized the workshops as had not happened since the departure of the soldiers. On one day in July there were three hundred absent. Some succumbed. Discord had, moreover, disturbed the relationship between the trade unions and the employers' associations several times during the war. The increase in the cost of living had led to many claims. The general strike, which burst upon the country at the time of the armistice, was a painful test for Saint-Imier. The watchmakers eager to go to the workshop were prevented by the strikers. The Federal Council reacted vigorously.

If the manufacture of compasses was now without future, that of electricity meters appeared to offer excellent prospects. But could it be developed without a corresponding decrease in the production of watches? Wasn't it wiser and more in conformity with traditions to apply to watch manufacture all the facilities of the factory, all its tools, all its forces? What a loss, however, to give up a product which had already passed the testing stage and would perhaps provide, in bad years, work to the assemblers! An autonomous company was set up to continue the work in a building in the city, on the Rue de l'Hôpital. Founded on November 30 1918 under the auspices of the old house, the Factory of Electrical Appliances Chasseral S.A. - such was its name - engaged a hundred workmen. Jean David, who had just spent two months in the technical office at Longines, became the director. The second son of Jacques, he had inherited his aptitudes. He had studied at the Federal Polytechnic School and the University of Zurich, where he had obtained a doctorate in mathematical sciences.

The careers which passed away entirely under the aegis of the winged hour glass did not diminish. From one year to the next one noticed few changes in the composition of the personnel. Only illness, death or an exceptional circumstance sometimes thinned their ranks. After Easter new faces appeared, smiling after successful examinations in one of the schools in the small city. The Longines watch owes a part of its good name to this fidelity. The old watchmaker did not deviate from the rules of his factory. He had learnt well the skills of his trade and he transmitted its secrets to his young companion. The workshop formed a community which had its customs and habits. On December 28, 1918, the house gave a gold chronometer to sixty-four people who had devoted twenty-five years or more of their life to the company. Since then, all those who served for this period receive the same reward and, after forty years, a large bonus.

Employees did not work more than 55 hours per week and on Saturdays the factory closed at midday. In 1919 the hours were reduced to 48 hours and the wages increased. Improvements in the machinery and the zeal of the workmen compensated for the disadvantages of this measure.

## Vexations and Success

After the war, the factory launched two 8-day movements which measured 19 and 24 lignes and gave rise to a flowering of special pieces: travelling, desk, ship, car and airplane clocks. Longines travelling clocks decorated many salons throughout the world. Generally conceived in the traditional style, they marked one moment in the long history of this artistic industry in which French Switzerland had always excelled. A luxury article could not have poor publicity: ten of these clocks were reproduced in an album printed by Draeger of Paris in which, under a tableau signed by René Vincent, a poet taught the way to gain the “courtesy of kings”.

The practice of wearing a watch on the wrist continued to spread. The soldier in his trench had shown the convenience of it. And the girl, considering the habit of her mother to look at the hour on her blouse to be quite out of fashion, wished on her birthday for a bright gold jewel, on a black ribbon to highlight it.

The deaths of Eugène Francillon and Jacques-Theophilus David, as well as the resignation of Joe Gagnebin, changed the form of the board. The general meeting appointed new administrators: Adrien Francillon in May 1919, and then in December 1920, Jean David and Marie Gagnebin, widow of Louis.

Is peace a guarantee of prosperity? “Work was abundant and remunerative, and all the markets demanded goods.” Optimism reigned. But it was, alas!, of short duration. Unemployment, the plague which morally harms people as much as war, reappeared in 1920. At Longines activity gradually decreased during first months of 1921. From August there was dead calm. Saint-Imier went into debt to help her unemployed. The canton and the Confederation came to the rescue.

This crisis resulted primarily from increases in the cost of all things, and the cost of living had more than doubled. Raw materials were bought at ransom prices. Salaries and wages had risen to previously unknown levels. Inevitably, as the plant managers noted, these rises “constituted a heavy load and increased our cost of manufacture in fantastic proportions; consequently we had to revise our rates and increase our selling prices in a way which blocked the development of business”. However, on all sides customers demanded a drop; if they still sometimes put in an order they stipulated “at very reduced prices”. Willingly or unwillingly, the house had to go into reverse. In October it put to its workmen an alternative: accept a reduction in wages and work only three days per week, or go without work. Many of them preferred the first option, but their trade union, based on the collective agreement that it had made with the manufacturers, pronounced a categorical veto.

The factory kept its doors closed and did not re-open them until the first days of the following year. The collective agreement no longer being in force, it re-engaged its workforce on conditions which simultaneously made possible a resumption of production and gave to each of them the means of living. For three years the shareholders did not receive dividends.

Longines continued to take part in the observatory competitions. In Washington, where the most famous trademarks in the universe clashed, its ship's chronometers often came first. For four years it abstained from appearing in Neuchâtel but was, on the other hand, regularly present at Teddington in England. Lastly, it was registered in Geneva from 1922. It had opened in that city, at Messrs Wirth & Co. its representatives for Switzerland, an adjustment office under David Perret.

Benefiting from stable business, it prepared a pocket alarm watch whose success was guaranteed in advance by its customers. This piece with two mainspring barrels was characterized by its finish and its precision. Consequently, anything that one could request from a watch factory the manufacturer of Saint-Imier was able to offer. Its catalogue included "the most varied calibres, from the simple to the complicated, the smallest to the largest". Hadn't its leaders always seen a source of strength in the diversity of products?

The Chasseral factory, disappointing the hopes of its promoters, suffered from the general stagnation which, all things considered, the watchmaking crisis was only one aspect. It had not yet produced its first fruits when it had to struggle in the midst of contrary circumstances. So when the Italian and Spanish currencies collapsed it lost its two best customers. Longines tried to support it by a new contribution to the company which it had sponsored. A waste of time and effort! Hoping one day to be compensated for its sacrifices, it again took over Chasseral S.A. and dissolved it on May 30, 1922. The manufacture of meters was continued in the same buildings. Jean David, qualified by his competency, remained at the head of the old factory which again become just a department.

In August 1923, the French scientist Jean Lecarme made various experiments on Mont Blanc "relating to atmospheric electricity, the acceleration of gravity and in particular the disturbances produced by altitude on chronometers, by means of ten Longines high precision chronometers and wireless telephony." The workshop head Edmond Chopard was part of the expedition. For a difference in altitude of 2800 meters, the instruments indicated a diurnal variation of 39 hundredths of a second, a quantity lower than that which physicists traditionally believed.

The important office in New York changed hands: since the death of her brother Emile in 1916, it was Miss Martha Wittnauer who, “full of courage and energy”, governed its destiny. Unfortunately the state of the house, already not very good before the crisis, worsened and created worries for its suppliers. Provided with broad powers and accompanied by Eugène Jeanrenaud, who was familiar with American conditions after a recent stay on the spot, Maurice Savoye embarked in November 1923 to seek, with the agreement of the banks, a reorganisation to ensure the future. The factory was forced to subscribe to shares for part of its assets and the personal management of Miss Martha Wittnauer was replaced by a board.

The activity of Baptiste Savoye did not remain confined to the factory. Like his predecessors, he considered it his duty to take care of the interests of the Swiss watch industry and to consolidate this community in which too many racketeers and troublemakers caused damage. He had succeeded Jacques David on the Swiss Chamber of Horology, sat for six years on the Federal Parliament and was for a long time on the board of directors of the National Bank. In 1917, he had taken part in the formation of the new Bern Cantonal Association of Watch Manufacturers where the idea germinated for a larger and stronger organisation.

Indeed, this association proclaimed in 1923 that only a union extending to all the watch making regions would be able to attenuate the consequences of economic crises and restrict the export of ébauches, which was advantageous for foreign competition. The idea spread. On the following 17 January in Neuchâtel, the F.H., or Swiss Federation of Associations of Watch Manufacturers, was formed; and Alfred Pfister, present on that first day, never ceased taking part in its work.

People in Germany continued to regard the Longines watch with great esteem; but the reasons which, in 1894, had induced Ernest Francillon & Co. to establish a branch in Berlin had disappeared. Moreover, this business, which had all the disadvantages of the system, created more trouble than satisfaction, and on April 11, 1924 Longines handed it over to Paul Bauermeister. However, the building on Jerusalemstrasse, which it had acquired to save something on the fall in value of the mark, remained its property.

The finances of the factory particularly felt the general malaise and the problems which we have related. Its bankers, who had made large advances, assessed the value of its share capital too low, relative to its importance in the accounts, and overrated, in this period of crisis, the estimate of the value of certain credits. The factory consequently had to carry out a serious depreciation. Then on May 3 1924, it raised its capital to 3,500,000 francs by transforming part of its obligations into shares; these shares “were privileged” compared to the old.

However, in spite of the protectionist laws enacted by several countries, business again increased and this industry, which had just tasted unemployment, again lacked skilled workers. In this time of large demand the company obtained authorization to work 52 hours per week.

It was going to re-live the prosperous days and, after having undergone many vexations, to know new successes.

In 1925, at the Paris Exhibition of Decorative Arts, the grand prize was given to the display which Longines created collectively with other houses of Switzerland. The next year, it individually received the same distinction on another continent, at the Second Universal Exhibition in Philadelphia.

Its precision adjusters made it “their point of honour” to maintain the reputation of the trademark. At the Geneva Observatory, two of their timepieces were at the top of the list in the competition of 1926. In a period of ten years the factory came first at Neuchâtel, Teddington, Washington and finally Geneva: it is a record. That does not mean to say that Longines never suffered defeat, because this very difficult art of chronometry sometimes causes quite bitter disappointments. But in those cases they acknowledged their bad luck and redoubled their efforts.

At that time, aviators achieved some of their most wonderful exploits. The daring ones wanted to cross the Atlantic. There were failures and there were also successes. More than any other, the Longines watch contributed to the conquest of the air. Its precision is useful for the naval officer to determine his location, but it is more so for the pilot whose machine moves so rapidly, as we know. In 1925, it accompanied Locatelli around the North Pole. In 1926, Mittelholzer carried it from Switzerland to Persia. In 1927 it was in the dashboard of Chamberlin and Levine between New York and Berlin.

On October 26, 1925, the house created for its personnel a “fund for retirement, old age and disability”. The old relief fund was henceforth dedicated to the “special and exceptional cases which disease, death or accidents generate”.

Like the jubilee fund, this new provident fund had been set up by Baptiste Savoye, who made it his cause. Wasn't this above all the most wonderful achievement of a long and profitable career? Do not forget that it was in 1871 that he had his start in what is retrospectively called “the miniature factory” and, since then, he had not ceased deploying his copious abilities of organisation and of being a man of action.

One day an illness kept him at home. In the evening of Thursday October 13, 1927, Longines lost its general manager. It remained closed until Monday. In remembering him, Saint-Imier gave to Baptiste Savoye the right of citizenship.

## A Memorable Crisis

From then on, the house had two directors instead of three: Maurice Savoye and Alfred Pfister. The board, which gave the presidency to the former, was then made up of only eight members, all already known to the reader except the engineer Egbert de Mulinen who had been elected after the recent resignation of Marie Gagnebin. Egbert de Mulinen had married a daughter of Ernest-Etienne Francillon.

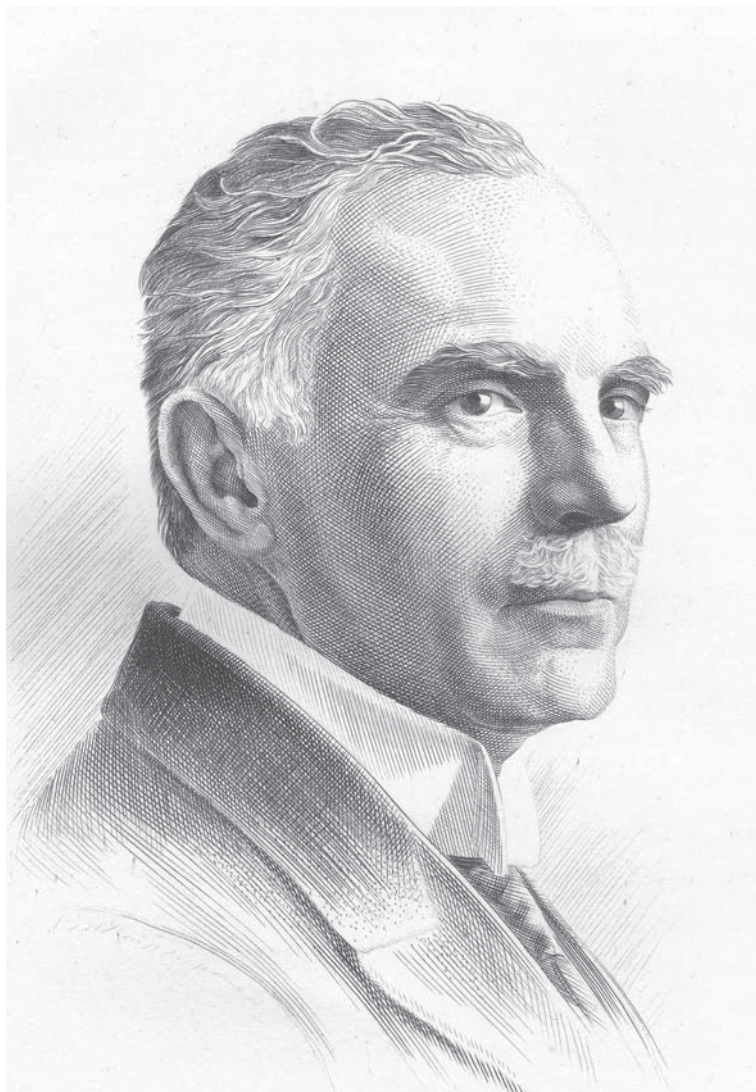
The navigators of the air continued to associate their great exploits with the Jurassic mark: thus the French Costes and Le Brix, the Americans Mears and Collyer, the Germans of the airship Graf Zeppelin, to mention just some of those who went round the world. Lindbergh, who had been satisfied with a compass for his crossing of the Atlantic, the bare minimum, designed a system on his experiments, a rigorous method for determining position, and preached the use of instruments made especially for it. Following a drawing which he provided, the factory built the first watch simultaneously indicating Greenwich mean time and the corresponding hour angle.

In 1928 the house in New York was established on Fifth Avenue. It had the wind in its sails. Wittnauer and Longines were two famous names in the forty-seven States of the Union and Canada, and tens of salesmen untiringly traversed these vast regions. Publicity was in proportion. Abundant use was made of advertisements in newspapers and periodicals, on billboards and cinema screens. Each day sixty-five radio stations gave the exact hour by the sound of the "Longines musical notes".

The factory, for its part, had difficulty meeting the needs of its principal customers and, moreover, it could not produce enough for the secondary markets. From America and elsewhere, it was enjoined to expand and double the number of its machines.

However, during this happy period the Chasseral meter department remained a source of misfortune. Whereas the cost of raw materials had greatly increased, sale prices were "prices of misery". How could it fight against the competition of a country like Germany, with its strong exchange rate and its cartels? And it was in vain that, trying to get out of the rut, it had started to produce other electrical items and cinema equipment. The workshops on the Rue de l'Hôpital were sold in 1928 to a new business controlled by a specialized company in Zug which, on September 26, 1929, decided to transfer to Geneva. Opposed to this removal, the administrators of Longines obtained an indemnity in favour of the community of

Saint-Imier. Not without sadness, they gave up trying to introduce a second industry into this city. It was seen that it was a dream, as was their hope “to acclimatize to this place a manufacture in which the percentage of value between labour and materials deviates much from what it is in the watch industry”. The few hundred workmen of the dissolved department did not have trouble finding new work. The factory took on about thirty of them. Jean David occupied a position in the technical office, but his end was to follow soon after that of the Chasseral factory.



*Alfred Pfister*

With the autumn of 1929, the six year old knell sounded clear and our history reflects it. If one believes the economists, the prosperity of that time, based more on speculation than on work, was artificial. It was in the Wall Street Stock Exchange that the rout began. Fortunes were lost and President Hoover had to face the fate of several million unemployed. Nothing is more contagious than such evils and Europe was shaken in its turn. Longines, fortunately, was better equipped

to face adversity than it was in 1921. Its accounts were in good order and neither it nor its customers had too much stock. Its heads looked to the future calmly and did not despair for a near recovery. Such were these men, even the most realistic.

Commander Byrd completed his first Antarctic expedition. With several scientists he left the United States for fifteen months, carrying on his ship the most complete equipment. He wintered in the Bay of Whales. While a detachment provided with dog sledges travelled over the ice-fields, on November 29, 1929 he took off in one of his planes, and two hours later announced by radio that he had reached the South Pole. The special watches in his plane and the chronometers on the sledges, all carrying the Longines mark, gained "the respect and absolute confidence" of these explorers.

"Elegant and precise", proclaimed a slogan of the house at that time. We have just seen their precision verified on the white deserts. Let us now go to the shores of Spain, and new elegance will strike us! Longines at the World Fair in Barcelona, works of art, scintillating with multicoloured fires. For the tenth time the factory received the grand prize.

The crisis, however, took a worrying turn and worsened for the Swiss watch industry, becoming a deep malaise whose causes were not only due to the state of the markets. American watchmakers re-opened hostilities with the Swiss watch. Congress voted in a tariff rate which was prohibitive and which became a frightening weapon in the hands of the industrialists of Illinois and Massachusetts. In addition, the export of Swiss ébauches and matching supplies was practised on a such a dangerous scale that, as in 1876, the country risked losing its watch industry. But opinion stirred, Parliament tackled the problem and in 1931 the Société Générale de l'Industrie Horlogère was created, which built on the existing organizations — F.H. was one of its number — and which, with the assistance of the Confederation, attacked the evil at its root.

Optimism was definitely no longer in season, and Longines had to shut down steam. The office of Messrs A. Wittnauer Co. passed through a difficult phase. The commission agent who, each morning, went on his farting scooter from the post office to the factory, still brought many letters from New York and elsewhere, but it was in vain that the sales manager sought orders by opening them. Since the formation of the Société Anonyme the sales turnover had never fallen so low. For the first time the profit and loss account show a deficit, and what a deficit!

The house shortened the working days of its personnel and stopped paying dividends to its shareholders. As far as possible it reduced its expenses and its risks. It decreased its overheads, worked to recover its credits and avoided accumulating

goods. It closed the adjustment workshop in Geneva and later, although two chronometers of Hans Wehrli were classified first and second at the Teddington Observatory in 1931, it gave up entering competitions. Each year it repaid part of its debts.

Finally, and it was the most difficult task, it had to solve the problem of prices once again. In all countries, purchasing power dropped and quality watches no longer sold. On January 11 1932 the house, which had already cut the salaries of its heads and its staff, announced to its workmen a reduction of ten percent in all hourly and piece rates. Those who had payments outstanding were requested to submit them without delay.

The majority of workmen were willing to accept the drop in rates but, joined together in their trade union, they voted against it. A discussion with the committee of the trade union on the state of the factory was unfruitful and at a second meeting the workmen maintained their decision. As it could not act in any other way without compromising its future, on February 20 the factory cancelled all work contracts and re-employed labour to suit its needs. But it took care to always provide, at some cost, as much work as possible in its workshops.

By means of an unemployment insurance fund, which it had set up in 1928 and had made compulsory, the Commune of Saint-Imier supported those of her inhabitants deprived of whole or part of their livelihood. When this source dried up, it resorted to loans, which broke the balance of its finances and attracted the censure of the Bern government. Saint-Imier, which owed a good share of her prosperity to the factory, thus supported it in difficult times.

The board of directors accepted two new members: Georges Gabus in June 1932 and Ernest Scherz in the following January. The former, son-in-law of Baptiste Savoye, manufactured watch cases in Le Locle. As for Ernest Scherz, he directed the Cantonal Bank of Bern, which establishment granted to Longines, in need of money, a very large credit. By chance he took up duties the very same day that the notary Gustave Miche, who had been the legal adviser to the company for a long time, was escorted to his last residence.

Necessity is the mother of invention. From the problems of this time was born, on June 24 1933, a management committee. It was composed of some of the administrators and studied in detail the problems relevant to the board.

Everything contributed to prolonging the downturn in international trade. All seemed in league against exporters: financial obstacles, devaluations, customs laws. It was not enough to decrease wages and expenses. In those years, we see the factory fighting against stagnation and completely reorganising its services and

manufacture. In the same way, by curiously identical means, the comptoir had redressed itself after 1860.

Alfred Pfister and his technicians renovated some of the calibres and designed new ones. Independent of the specialities, which remained one of the main supports of the trademark, they reduced the number of calibres to seven: one rectangular, two oval and four round. Quality control and the machines reached an extreme precision. The positions of plate holes and bridge feet were fixed by means of the presses, no longer needing to be adjusted during assembly. The jewels used to support the wheels were no longer crimped by hand, but were driven in by machines.

Thus the house, under the driving force of its leaders, modernized its methods, increased its production and adjusted its costs.

At that time it entered into conflict with Pérusset & Didisheim and cancelled the contracts which bound them and concerned, as we have noted, France and the three American republics. These intermediaries had conflicting interests and the volume of sales had dropped. In September 1933 the “Société Française Longines”, a limited liability company controlled by the factory, was established in Paris on Haussmann Boulevard. The new representatives worked the markets of Brazil and Uruguay. Finally, after having restructured, Pérusset & Didisheim again took over the Argentinean market.

The budget of 1934 cut “all expenditure in this extreme situation, reducing directors’ fees by 40%, the salaries of managers and staff by 30% and the wages of the workers by 20%”. For three years money could not be put into the fund for retirement, old age and disability: it was now dry. And the shareholders were faced with accounts whose debts exceeded half the amount of the authorized capital. Nevertheless activity seemed to reappear. As the economic war continued with severity, was it not better take part in it? At Longines, people started to regard the new state of affairs as normal and no longer spoke of a crisis.

The house brought its European representatives to Saint-Imier, inviting them to inspect the redesigned calibres and to join together on a common policy for sale and advertisement. This meeting revived the confidence of all in the destiny of the trademark and reinforced old links. Alas! the relations of the factory with Messrs A. Wittnauer Co. had become less cordial. Since 1930 business in America had been limited to the delivery on account of a few watches manufactured previously, and from this starting point it was necessary to revise the large expenses. In July 1934, the council charged Maurice Savoye with going to New York to conclude a new agreement.

Various ordinances of the government, as well as a decision of the Federal Court, crowned the long and patient effort of organization which, in the general interest of the Swiss watch industry, had been initially undertaken by some clear-sighted but isolated men, and then continued by increasingly broad and powerful associations. The out-of-date system of free competition, whose excesses led an industry to its ruin, was supplanted little by little by a regime of economic control in which, to tell the truth, private initiative did not lose its rights.

The year 1935 was hopelessly calm.

In 1936, the United States market was reopened to the Longines watch. In a reorganized house which was going to be called the Longines-Wittnauer Watch Co., the distant successors of Auguste Mayor had refound the dynamism of the best days. Each mail again brought orders to the factory, the workshops were re-filled, the machines turned all day. What a joy for a population which had faced hideous unemployment! And what satisfaction for those who had, on a tormented sea, steered the ship to a safe port!

Adrien Francillon, who to his sorrow did not have a family, succumbed to angina pectoris the day before Christmas. All were saddened on learning that this courteous head, enthusiastic and precise, this man devoted to the city, faithful in that way to one of the beautiful traditions of Longines, was no more.

On New Year's day, the board promoted Eugène Jeanrenaud, "in gratitude for his good and faithful service over twenty-five years". E. Jeanrenaud directed the American department and the secretariat.

The accounts of 1936 showed a small profit. Returning to an old custom, the buyers all demanded to be served first. Life started again.

## Social Peace and the 75th Anniversary

A watch sent to the United States must carry the name of the importer or the manufacturer. In order to shorten its English denomination and so be able to engrave it on the smallest movements, from May 13, 1937 the company of Saint-Imier was entitled to call itself: *Companie des Montres Longines, Francillon S.A.*, or *Longines Watch Co., Francillon Ltd.*

It has been seen that the history of this factory does not have for its only theatre a corner of the countryside at the foot of the Chasseral. Can we compare it to a state whose inhabitants are its workmen, the government its directors and the ambassadors its correspondents? A world fair again takes us to Paris. The *Société Française Longines* had settled in the noisy Avenue de l'Opera. Managed by Gustave Jung, it overcame initial difficulties and drew attention to the Jurassic mark again. Longines sports' timers and stop watches were used in Chamonix to control the races of the International Ski Federation. They assisted the referees in the Paris Stadium where the French Athletics Federation organized resounding trials. At the exhibition, as always, the Swiss watch attracted attention. But its manufacturers, because the effort was not worth a candle any more, mutually agreed to give up making a harvest of the medals and grand prizes.

In the afternoon of July 11, 1938, the curious went to the Le Bourget aerodrome. The American Howard Hughes appeared out of the clouds from New York. After midnight, having refuelled, he flew on to Moscow. On July 14 the street lights had been lit when the surprising news spread through the capital: the aviator had taken less than four days to fly around the world and return from the west to his starting point. In the meantime, the French company received this dispatch from Saint-Imier: "Howard Hughes plane equipped exclusively with Longines aviation watches and chronometers."

Why is it necessary that, like human happiness, commercial prosperity is always so fragile? In September 1938, the political atmosphere became electric. Consequently, purchases were put on hold and industrial activity became less constant. At that time the factory built two special pieces. First, a simplified chronograph which it baptized the "stopseconde". And then a deck watch, a pocket chronometer, called the "sidérographe", which was based on the work of some aviators from Europe and America, and whose advantage was to speed up the calculation of position by providing a direct and very exact indication of the hour angle of the vernal point compared to Greenwich.

In 1939, the sidérographe held the place of honour in the window of the house at the Zurich National Exhibition. In the same year an international exhibition opened in New York. The American Museum of Natural History, in collaboration with Longines-Wittnauer Watch Co., built a vast cupola dedicated to Space and Time. A planetarium occupied the centre, while at the entrance the visitor could contemplate all the types of watches that the factory of Saint-Imier had produced since its foundation.



*Maurice Savoye*

On August 29 many watchmakers did not return to the bench which they had left the day before. Members of the army reserve, they answered the call of a government very anxious about European events. On September 1, Germany attacked Poland. The general mobilization of the Swiss army, fixed for the same day,

further weakened the forces of the company. The loss was especially felt in the assembling and finishing departments; balance could be restored only by working short-time in the other departments. Following the examples of Ernest Francillon, Jacques David and Louis Gagnébin, all three of whom held important commands, Maurice Savoye was a colonel and at the beginning of this war we find him leading the section of the general staff for prisoners and internees.

Commercial difficulties multiplied as the war widened and became more violent. The Allies organized a blockade and the Axis countries reacted with a counter-blockade; it is a miracle that Switzerland could continue to distribute millions upon millions of its watches each year, and always find some means of reaching the most remote regions. The plane supplanted the boat. Instead of following a straight line, parcels made incredible detours. War igniting in the Mediterranean, it was via New York and the Cape that they arrived in Cairo. One did not write any more, or as little as necessary, one telegraphed.

The volume of exports to overseas countries compensated for the loss of several European markets. The Wittnauer house progressed and alone absorbed a good half of the production of its supplier. Once more the factory worked at full output. "To exploit to the end the possibilities of the present hour", such was its policy at a time when it feared an invasion of its own territory as much as the halting of exports.

While the war tore the world apart, harmony did not cease to reign between the owners and workmen in the Swiss watch industry. A collective agreement signed in 1937 ensured a peaceful resolution of the question of wages and holidays. Also, a form of family benefits was set up in January 1942. The evolution is remarkable. We will say further that Longines gave a particular colour to this spirit of agreement.

On an order from the government, a company for "industrial air defence" had been formed in 1938 from a few tens of employees and workmen exempted from military service and a small number of workers. At its head was Albert Guégisberg, an employee of the technical department who, for forty years, had led the firemen charged with protecting the factory against fire. In the event of an attack, it was to maintain order, fight fires and help casualties. When foreign planes flew over the area at night, a team went in haste to the factory. While an armed guard had the task of supervising the entrances of the buildings, a special section was to help remove valuables and destroy the essential machines.

Thanks to the intense activity which the house had experienced since 1936, the state of its finances went on improving. Year after year, it devoted profits to

paying off its debts from the crisis. It repaid its bankers and its bond-holders. Its privileged shareholders gave up their rights and, after being unfruitful for eleven years, the ordinary shares earned dividends again.

In 1942, the factory celebrated its 75th anniversary.

On April 20 at the Trade Fair in Basel, it signed an agreement with its representatives Wirth & Co., the company which sold Longines watches in the twenty-two cantons. On May 9, at the shareholders' meeting, the president of the board recalled the origins and the early days of the company. Lastly, on August 10 it was decided that, excepting some serious event, the 26th of September would be the day of solemn commemoration ... The telegraph notified customers on all five continents. After which the directors, employees and workmen enthusiastically prepared for the festival, everyone wanting it to be beautiful and grand. Several committees were set up. There were only six short weeks to go.

On Friday September 25, a delegation spread flowers over the tombs of Ernest Francillon and his collaborators. A bonus was given to all the people registered on the rolls of the factory. In the evening, musical people went to the whitewashed collegiate church of Saint-Imier to listen to a concert given by the violinist André de Ribaupierre, the organist Charles Faller and the chamber orchestra of the Conservatoire de La Chaux-de-Fonds.

At dawn on the 26th, the brass band of the cadets traversed the streets of the city to announce the great day. Frontages were draped with flags, streamers and floral watches. In the morning, the bells sounded and people went out, happy in spite of heavy rain. A service is celebrated in the protestant church, a mass is said in the catholic church.

In the courtyard of the Gymnasium a tent of gigantic proportions had been erected. It is there that the principal ceremony will take place. Decorations emphasized the sable and gold of the arms of Erguël, and on a pale blue background an emblem, a famous name and two dates. Each table is decorated with carnations and greenery. An animated crowd settles. The master of ceremonies, Louis Courvoisier, son-in-law of Jacques David, who entered the office of the factory in 1929, welcomed to the festival the invited dignitaries, the suppliers to the house, its shareholders and its workmen.

To the lord all honour! Maurice Savoye gave the first speech. After having depicted the dark years and the brilliant days in which the history of the factory was woven, he drew a double lesson from it: "work without capital can only lead to disappointment, and capital without work remains unproductive ... We should not rest on the laurels acquired over the years, but work and always work harder,

because work frees man, not only materially but also morally. There is no worse poison than idleness, there is no worse destroyer than discord.”

Doyen of the workshop heads, Charles Chatelain, evoked the memory of former owners. Then, expressing to the current directors the feelings that all the personnel felt towards them, he presented an address to them and offered flowers to their wives. The house in its turn used this unique event to celebrate, in the presence of all, the workmen who had twenty-five or forty years service behind them and to honour at the same time its oldest representatives and suppliers. The banquet which followed was accompanied by music, ballet and songs. Conversations cross over each other, merry and cordial. New friendships are formed between people who, as varied as are their functions, know that they are dependent on the fate of the whole crew. Telegrams come from the most remote capitals and testify that everywhere the “ambassadors” of the factory share its joy and pride.

Short speech follows short speech. The president of the government of Bern, Max Gafner, notes the riches which come to a nation from a company like Longines. Other speakers express the best wishes of a friendly manufacturer, an economic organization, the suppliers to the factory, the town of Saint-Imier. As for Emile Giroud, secretary of the Swiss Federation of Metal and Watch workers, he recalled the collective agreement of 1937:

“The contracts”, he said, “between employers and workers deeply changed the industry for the good of the country and all those who live from it. An era of peace followed a period of social stress, and it is in a spirit of agreement and reconciliation that the problems touching the living conditions of workers have been approached. Let us wish that, for the good of all of us, it will always be so in the future!”

The festival ended with a party to which each workman took his wife or girlfriend, each woman employee her fiancé or husband. Decked in red and white, the grounds of the Gymnasium absorbed the overflow of this multitude. The songs of the baritone Paul Sandoz and various groups alternated with those of the imposing Longines choral society. Hitherto unknown artists put forward their talents. A female workshop astonished with fashionable songs in praise of the factory. A review shot some barbs. Finally the event was crowned by a dance where youth reigned; the children who one day would inherit from the owners; the children of those who a short time ago did their first assembling, their first adjustment, their first turning; the youth of those who reigned of old but whose eyes are still sharp and hands still sure.

On Monday, all briskly returned to work. The majority were aware that they had just lived one of these days which count in human memory. For a long time, conversations centred on the “seventy-fifth”.

The board of directors recorded, towards the end of 1942, the resignation of Jean Aeschlimann, the vice-president and old friend who had shared the vicissitudes of the house since 1895. After which there were only six members: the president Maurice Savoye, Ernest Scherz, who assumed the vice-presidency, Alfred Pfister, Charles Morel, Egbert de Mulinen and Georges Gabus.

Fashion had changed from the rectangular watch in favour of the traditional round and square ones. At one time a bulky display, now thinness was the height of elegance, thinness that only rigorous technique managed to reconcile with precision. Dials took on new colours. The needs of soldiers, the modern taste for practical solutions, and some snobbery, made for the success of the waterproof case, the chronograph and the centre-seconds watch.

Recognising the marvellous progress made over thirty years, the Neuchâtel Observatory had started a chronometric competition reserved for wrist watches. But there, instead of awarding prizes, it gave a simple certificate to any watch reaching a given regularity. In the 1942 trials this certificate was given to fifteen Longines movements which achieved this accuracy, and which Robert Chopard and Fernand Wenger had regulated. Another Longines watch was first in the classification.

The countries of the Axis encircled Switzerland and limited its exports. Onto this obstacle a financial difficulty was grafted in July 1943: the Confederation received so few goods from overseas that its balance of trade was skewed and the National Bank had to refuse to convert all dollars into francs. This serious situation worried the watchmaking world. Will it become necessary for there to be unemployment even though there is no lack of orders or raw materials? After a discussion lasting several months, between the employers' associations, the banks and the government, decrees were made to ensure the exchange of American currency by quota, putting part of the risk onto the industry.

The counter-blockade ended with the freeing of France. But the industry suffered from the lamentable state of communications and the ports. Several times traffic completely stopped. Goods accumulated at the Swiss border and, from May to October 1944, the factory worked only 42 hours per week. The building in Berlin, which Longines still owned, was destroyed by bombs.

The former recipients of the fund for retirement, old age and disability had received, since 1939, a reduced pension which was paid from general expenses. At

the time of the 75th anniversary, the company assigned a sum of 200,000 francs to the reconstitution of the fund. The family of a "manager", of the two houses diffusing Longines, gave to the personnel identical tokens of their affection. Finally, the factory took a number of measures in the social field which are of immediate interest. From 1943, for example, a workman could receive part of his wages in the form of "tax-stamps" and distribute his fiscal burden over the 52 weeks of the year. And the Longines Journal, published every month, and the "industrial culture" required by an increasingly difficult supply, contributed to maintain alive the harmony between heads and subordinates and testified many times to the goodwill which animated all.

But the most splendid festivals and the most beautiful material realisations would be nothing, if at the same time a sense of true collaboration and a spirit of solidarity were not strengthened by a broad and noble understanding. So if the divergence of interests seems to move the classes away from each other, there is a higher requirement which commands to them to come together.

When the guns ceased deafening the world, work was carried out at Longines in a climate which was not without analogy to the family atmosphere of the comptoir or the workshop of 1867.

## The Present Day

Two years have since passed. If our book is complete, it is not the same for the work of the factory. Because life continues and Longines, strong and proud of its eighty years, retains all the vigour of the past. A vast program of transformations is underway. A new building, an extension of that of 1905 and designed according to the most modern principles, will replace the original structures. Essential formerly, the canal and lock have lost all utility and the river, which dictated the location and indirectly the name of the factory, will return to its native bed.

The end of hostilities unfortunately did not mean the end of financial and commercial complications. However, the watch industry has never had so many orders as in these post-war years; in all latitudes watches and yet more watches are wanted. The manufacturer of Saint-Imier, from the prestige of its trademark, has to meet innumerable demands. The perfection of its methods allowing it to choose the ground which is most favourable, it is even more dedicated to the production of small movements. Each year this preference is justified by the Neuchâtel Observatory competitions; in 1945 a Longines watch gained a record in precision in the category of wrist-watch chronometers.

With small movements, pretty cases. The tendency, which we see in the almost total disappearance of pocket watches, we also see in the evolution of the external form, the refinement of simple watches and the elegant and often daring lines of jewellery pieces. We are a long way from the thick key-wound watch, the famous "18L" of memory, and just as far from the extra-thin lépine of 1903! From time immemorial this factory has provided very pretty watches, but always it wanted them to be prettier ... At all times it endeavoured to increase both the excellence of its movements and the beauty of their ornament. Didn't its founder say that it was always necessary "to progress"?

This motto must be that of the heads and employees of tomorrow! It must be that of the workmen and women who demand impeccable work from their machines and obtain it not without difficulty! It must be that of the adjusters and the young watchmakers, since good watches cannot be made without their talents. Hold to this motto, and Longines will continue to contribute to the advance of an engaging industry, an art that Montaigne considered to be one of the most beautiful inventions of the human spirit. Devoting themselves to their noble labour with the same zeal and the same intelligence as their forebears, in a soon to be enlarged and renovated factory, the rising generation will write a new chapter worthy of the previous and illustrating successes no less bright!