

THE GREAT STORY OF SILK TRADE OF LYONS

By Philippe DEMOULE – Year 1979

I - THE SILK TRADE OF LYONS FROM BEGINING TO JACQUARD

Numerous are the versions of the appearance of the silk. Confucius's book places its discovery in 2640 BC by a Chinese princess. "*L'Echo de la Fabrique*", industrial and literary newspaper of Lyon of June 3, 1832 asserts us that this art was invented on the island of Platis, and that the emperor Héliogabale was the first one who wore silk clothes in Europe. Be that as it may, this natural fiber was known in China from the highest antiquity.

Silk routes succeed in Alexandria where from the Arabs export precious tissues towards Europe. The Asiatics preserve jealously the secret of the breeding of the silkworm until XI-th century, date in which the Italians learn about it.

The book of Etienne Boileau's professions published between 1258 and 1268, learns us that the art of the silk was known in France from the XIII-th century.

When the seat of the Papacy, situated then in the papal town of Avignon, was transferred in Rome, Italian weavers who had lived in Avignon came to settle down in Vienna (in south of Lyon) and in Lyon in 1377.

In the XV-th century, France is far from being able to equal the Italian production of silk trades which spread in Europe and in France. Towards 1450, Charles VII forbids the custom of sheets of gold, silver and silk "*others than those having the seal of Town of France*". Then, as a logical result to check this "*great voidance of gold and silver that every year makes denostre realm*" due to the massive imports, Louis XI proclaims his will to introduce in Lyon the art of the silk in 1466 by granting privileges "*to the workers who will come to demourer audict place of Lion to make practice ledict ouvrage and subtilty of sheets of gold, silver and silk and the other dependences*". This initiative was so badly received in Lyon where Tours was appointed to assume this role.

It is necessary to see that Lyon was above all a city of fair and trade little prepared for an industry the establishment of which is purely artificial, because Lyon will not be a producing country before XVII-th century.

In 1531, Francois Ier frees the weavers of the taxes and makes come in 1536 two italian weavers, Etienne Turquett and Barthélémy Narris. A decree declares the city of Lyon "*store of all the raw and shaped silk trades*" which entered France. It is in 1540 that is established the Corporation of the silk weavers, but they are there again to learn the rudiments of the profession. The Factory of Lyon will never be a big establishment comparable to the Factory of Tapestries for example, a century later, but rather a community of traders, bosses - workers and companions spread in the districts of the city. Numerous edicts try, between 1555 and 1579, to dike the luxury debauchery of the middle-class persons which forces the noble persons to show more luxury still, but royal decrees limiting the length belts and dragnets, governing the wearing of precious tissues with a surprising precision, go unheeded;

" As a prince of blood, a trader cloth merchant wears the sword, walks the features hidden under a wolf of black velvet fixed by a thread of archal held in his mouth ".

After Louis XI and François Ier, it was Henri IV who gave a new impulse to the silk trade by developing the breeding of the silkworm in France to fight against excess expensive imports. One makes come to Paris Olivier de Serres whose works one knows and who claims to be able to fire *" big deniers by admirable industry of the worms which vomit the quite spun silk, being fed by the leaf of meurier "*. he hurries to come from the bottom of his Vivarais (south of France), escorted by his horse carrying his big studded suitcase, a marble plate for king and a bundle of fragrant plants to be distributed to the courtiers. Henri IV makes do a brochure of popularization extracted from " Théâtre d' Agriculture " and makes it carry in sixteen thousand parishes, accompanied with specialists who distribute their education through France, as well as of seeds of silkworm and 400 000 feet of mulberry tree. King himself in fact to plant 20 000 in the gardens of Tuileries. It will appear afterward that the valley of the Rhone was more convenient to this culture. After the death, edicts forbid to wear silk and golden tissues and Lyon is soon ruined. In 1619, a big number of workshops is forced to close its doors and 6 000 workers are reduced to the unemployment.

Two reasons seem to explain that successive kings chose Lyon to develop there the weaving mill; first of all, this city is situated in the outlet of the valley of the Rhone which was very convenient to the breeding of the silkworm. Then, Lyon is also the door of Italy where from came to us these prestigious materials and by where passed in transit the imports.

Materials of the beginning of the XVI e century were at first only imitations of the Italian silk trades, but bit by bit appeared original creations as the lampas with lace the decoration of flowers and stylized ferns of which was interrupted with strips imitating the lace.

Under Louis XIV, the development of France allowed him to free itself from this influence. Under Colbert, the Big Factory becomes the incontestated centre of the silk where are created rich materials with which like countering themselves the princes of the church and the State. Of this time reached us only few suits, most of the time destroyed to get back the gold of it whom they contained. Our patrimony textile industry consists especially of soft furnishings: velvet, damask, brocatelle in big carmine or green songs. The luxury with which surrounded himself Louis XIV made of Versailles a big show of mode observed by whole Europe. Even at the man, the dress, rich in sophisticated colours, in embroidery and in laces, was an mean current to assert his personality and her taste. The silk worker is then in full ownership of its art and its big skill, allied to the talent of the draftsmen, ends in masterpieces of a rare quality. The natural flowers are treated with most possible realism.

Under Louis XV, decorations become asymmetric with an appearance absence of order in the arrangement of the flowers of which certain, imagined by the draftsmen, are of a big whim, before the fashion of the "chinoiseries" which renews the directory of ornemanistes. At the end of time Louis XV, the size of flowers is reduced, they simplify themselves and organize themselves in bouquets surrounded with sinuous ribbons.

Under Louis XVI, the reduction becomes more marked, bouquets connected by cords are placed between vertical strips. Philippe de Lasalle distinguishes himself by his remarkable tissues with big motives intended for the French and foreign palaces.

Under the Revolution steered against the abuses of the powerful of the Church and the Aristocracy, the Factory loses a big part of its clientele and rich shaped tissues are replaced by plain tissues, decorated with embroidery.

The loom remains primitive très for a long time before appear the loom with treadles, then the draw loom which comes to us from Italy. On this type of loom, warp yarns are raised by intermediaries of ropes activated by the draw boys. In 1470, Jean le Calabrais abolishes the draw boy by returning ropes towards the weaver, in front of the loom. Regrettably this system forbids the make of big motives. In 1620, Dagon finalizes a loom who contains 2 400 cords instead of 800. But it is during the XVIII-th century when the material asserts itself and becomes more sophisticated. In 1720, Garon perfects Dagon's loom. In 1725, Basile Bouchon (from Lyon) invents a paper drilled in the hand, which an assistant applies against the loom and which selects warp yarns. In 1733, English John Kay invents the

first flying shuttle. Next year, Falcon replaces the paper drilled by Cork by a chain of drilled cards. In 1744, Vaucanson, the father of machines, the brilliant inventor of the " Player of flute ", mechanizes Falcon's loom, but this loom will remain unusable. Then, Philippe de Lasalle returns exchangeable simples and applies John Kay's batten to the loom in " la tire". Finally, towards 1804, the mechanics Jacquard loom will be given birth in Lyon by Joseph - Marie Jacquard.

The development of the Factory was rather slow. In April, 1544, the Community sends to Henri II a request to obtain the ratification of the "*Regulation getting the art and factory of sheets of gold, silver and silk which will be made in the city of Lyon*". One declares while 12 000 persons are occupied to the work of the silk, false figure quoted for the need of the cause because in 1575 we find 164 velvet workers, 34 taffeta workers, 11 filleux of silk, 15 dyeers, is 224 persons, number to double if one takes into account *dévideuses* and pupils. In 1621 we find 716 bosses, 128 companions, 265 pupils for 1 698 looms, to which it is necessary to add the carpenters for the looms, the warping workers, *dévideuses*, *tordeuses*, dyeers.

The most former inventory, drawn up to Jean Dagon's death, silk boss - worker, reveals us the misery in his detail. Some rare wooden functional furniture of walnut, some domestic tools, "*a jar on the fire with the lid, four spoons and two iron skimmers, a small frying pan, a small box appropriate to hold the salt, the keg appropriate to hold the vinegar, as for the linen, there were only four shrouds all broken*".

Another document, kept to the municipal Archives of Lyon, shows itself revealing as for the conditions of life of the silk worker. It is about the budget of a boss - worker, current over the year. Describing exactly the nature of the work executed on the three looms and the tasks of the silk worker, his wife and the worker, one supposes a continual work of 269 workdays at the rate of two ells three quarters of tissue a day and by loom. The account of receipts highlights a total of 1 800 pounds. The account of the spending, very precise, because it books as well the salt, the pepper as the tobacco and the furniture polish of furniture is also très squeezed because, for the maintenance of the husband, for example, one counts a dress for eight years, a shirt, a handkerchief, a pair of bottom, other one of the shoe and resemellage a year. It highlights a total of expenditure of 2 049 pounds which exceeds of 249 pounds the amount of receipts.

When in 1554, as we saw it, the Community sends to Henri II a request to obtain a rule confirmed by bosses and companions, a distinction is done among them. The access to the profession remains free, what does not satisfy the bosses frightened by the competition of the number. So they ask in 1583 for the obligation of the payment of a tax and for the fabrication of a masterpiece for the obtaining of the title of mastery. In 1596, a regulation dedicates for the first time the narrow conception of the work organized in corporations, adding the compulsory rules of the learning and the compagnonnage. The learning imposes on the pupil to live at the boss's, this one having at the same moment a role of professor and educator. A regulation of Colbert in 1667 indicates the duration of the learning in five years. The minimum age is of thirteen or fourteen years, but it is necessary to note that the Factory employs for the works appendices many younger children who have not pupil's status. In the contract, the boss undertakes "*to accommodate and to sleep the aforementioned pupil, to feed him, to supply him fire and light, to make him clear his big linen and perfect it in his manufacturer's art in materials of silk, without hiding anything to him from what depends on it*".

It is the time of test for the young man that complies with the discipline, perfects in the profession and is penetrated with its traditions and principles. To obtain companion's title, the pupil should, in 1667, realize the following work: "*an ell of velvet or satin or damask, either brockets of gold and silver, week before the end of learning in their house or of the Community*". When the test was not surmounted, the learning was prolonged of six months or one year. If it was satisfied, the new companion was registered on the Register of the Companions, for a variable fee. He has any freedom to choose a boss and to change it if he wishes it, but the usage was "*to finish the work piece which it will have begun while that it lasts*". The condition of the companions was not famous and, in 1787, the Abbot Bertholon will write of them: "*The workers of Lyon are fed and accommodated at the boss; they work eighteen hours, even more, every day, without any waste of time because a quarter of an*

hour, several times less, is enough for them for each of their meals ". The duration of the apprenticeship is of five years. From 1686, the masterpiece, for the obtaining of the title of mastery is defined as follows: " an ell of material on a loom ". The bosses were authorized " to disturb and to move silk and cords of the looms and the companions striving for the mastery will be obliged to all replace with the suitable diligence and the exactness ". In case of failure, the compagnonnage is prolonged of one year.

The boss - worker, him, can work for several manufacturers on the condition of not mixing the threads who were supplied to him. Besides he has the obligation to carry the work finished to the "*Office of the Community* " to be verified and that it is affixed to it "*initials of his name, name and quality of the material, as well as number of the threads of which the warp consists* ". The bosses affix then the imprint of the "*Office of visits of materials of silk of the Factory of Lyon* ".

The manufacture, is very regulated. Quality, width, number of threads, titles of silks, nothing is left at random. This rule which can seem drastic explains itself by the fact that the Factory being a sort of collective agent of production whose all the tissues should present similar characteristics, the Corporation could not admit that the seal of quality of the whole Community can be put in danger by the only one of its members.

The Big Factory established so in the course of the centuries until do of Lyon the capital of the silk. The crises and the successive bankruptcies did not master themselves without any trouble and without sweat on behalf of the workers and the foremen. But were needed several centuries so that is born in the consciousness worker a real action group and that the anger in 1831, during the Revolt of the Silk workers, in the famous shout mutters "*to live free by working or to die by fighting* ", accompanied with Aristide Bruant's most famous song:

*"Mais notre règne arrivera
Quand votre règne finira!
Alors nous tisserons
Le linceul du vieux monde,
Car on entend déjà
La révolte qui gronde!"*
*"But our administration will arrive
When your administration will finish!
Then we shall weave
The shroud of the old world,
Because one already listens
The revolt which mutters!"*

But this is another long history...

II - THE SILK TRADE OF LYONS AT THE TIME OF JACQUARD

During the Revolution, steered against the rich aristocrats and the monk, the Factory was felt, losing a big part of its clientele and rich shaped tissues were replaced by plain tissues, heightened by embroidery. In his turn, Napoleon helped this industry of Lyons. Of passage in Lyon, he visits the workshops of weaving mill. A silk trade which keeps the Historic Museum of Tissues gives this registration: "*Made in the presence of the First Consul in Lyon the 26 Nivose An X*". The furniture storehouse will do for the manufacturers of Lyons of important orders for the imperial places of residence.

At the same moment, Gaspard Grégoire's famous velvet (portraits, decorations according to Raphaël, Greuze, Vien, David, Berjon) painted on the warp, are remarkable masterpieces of a professional skill and an accuracy.

From then on, the invention of Jacquard had allowed to divide the prices and to multiply the variety of the motives, reaching so a wider clientele. The Factory continued to adapt itself to the evolution of the market and its ascendancy was confirmed under the Second Empire, in the starting up of the heavy industry.

As we saw it, the mechanics Jacquard loom is given birth towards 1804 in Lyon by Joseph - Marie Jacquard (1752-1834). Son of silk worker, Jacquard , then 38 years old, tries from 1790 to invent a mechanism which would allow to raise automatically warp yarns. Till the end of the XVIII-th, the weaving mill of bound materials was made still completely in the hand.

Jacquard resumed for his works the inventions of Bouchon and Falcon, making from their "manual" automatism, a mechanical automatism. The first mechanics, patented in 1801, was perfected and finished by him in 1806. He is indeed so the inventor of the principle of the mechanics, but one forgets generally to honour the collaboration of Sckola and Breton who gave it the perfection that it achieved since.

The legend of Jacquard wants that during a public exhibition of the device, a group of silk workers cast hoofs (sabots) by resentment in the mechanics to destroy the mechanism of it. The word "sabotage" would have acquired a new meaning become a common use of it from 1831, during the Revolt of the Silk workers.

Indeed, one of the essential characteristics of the mechanics Jacquard loom, was that the only one of these loom killed the employment of the draw boys, who raised manually warp yarns.

It would be there only about a legend. In 1805, took place a public sale of loom models, gathered by Philippe de Lasalle. One aspired in twists that this sale, in which appeared a Jacquard loom had been ordered by the council of Industrial tribunal to satisfy the exasperation of the silk workers weavers against the unfortunate inventor. Now this can not be because the council of Industrial tribunal had no competence of such a public sale.

Maybe some dissatisfied silk workers, not seeing the advantages of the system, they threw some gibes, but this had not should go farther. It is what rereleases some report of an inquiry done by the director of the "*Revue du Lyonnais*" after the death of Jacquard. The likely purpose of the sale was simply to free the rooms of the "*Palais Saint Pierre*" where looms were exposed and to which one wanted to give another destination.

The Jacquard had the advantage to kill the preparation of "*simples*" and the preparation of cors, to kill the work of draw boys; the manipulation was simpler and its cost was twice lesser than that of the former loom.

This invention, coming half a century after the John Kay's first flying shuttle, remains the most spectacular innovation in the technique of the weaving mill, but also the most striking, as far as it was going to open the road to the mechanized industrial weaving mill, marking the end of for ever past

time. However in 1810 three thousand Jacquard looms, in 1813 fourteen thousand Jacquard looms and in 1835 thirty thousand Jacquard looms beat at the rate of the heart of the laborious city. During the second exhibition of the products of the French industry, in the Year 9, Jacquard loom received only a bronze medal with the following mention: "*Jacquard, of Lyon: inventor of a mechanism which kills in the manufacture of bound materials, the worker called a draw boy*".

Contrary to the main rule, to Lyon, the weavers are men, women being employed on the works appendices as unwinding of the silk fleets, preparation of quills and espolins... painful and boring works. The feminine condition is not then attractive. In an article of the "*Echo de la Fabrique*" of Sunday , March 23, 1834, Jane Dubuisson, editor of the " Councillor of the women ", speaks to us about this poor condition.

How works *Fabrique of Lyons*?

In 1830 it monopolizes the quasi-totality of a population of almost 150 000 inhabitants.

In the summit, eight hundred manufacturers who make absolutely nothing but content with buying the silk, with making it weave and to sell it. Taking no risk, they wait for the firm order of the customer before giving some work to the foremen. Haughty, little scrupulous, Reybaud sees them as agents rather than as manufacturers, very different from foremen considered as cheerful lads. For Audigamme, they are two races very different. The manufacturer is a hypocrite who pursues of her diligences the woman of the foreman who comes to take the silk or to bring back the rollers of weaved material. Because this baron of the industry does not hesitate to use its power to crush all the hesitations

Down, eight thousand foremen who possess the looms, quarrelling the work distributed by the manufacturer, their competition helping in the decline of the price of a way. They should make a weight of weaved material equal to the weight of the successful materials deducted from a certain percentage of accepted scrap. The risks and the expenses of the production are for them. Here is in illustration a case subjected in 1831 to the council of Industrial tribunal :

The foreman Boferdin had disposed up for the manufacturer Champagne a loom for handkerchiefs. The preparation had cost 42 francs. Noticing that the new article did not produce, the manufacturer ordered to stop earlier than foreseen and paid the then made handkerchiefs 66 francs. The foreman owed to his worker a 33-franc salary. He had so after one and a half month of labour 33 francs for 42 francs of freshly engaged.

To survive, the foremen defend themselves then individually as they can it, practising what one names the "*taking ounce* " by annexation of the weight of a foreign body to the work, water or oil and keeping so for them a part of the silk given by the manufacturer. Balzac, in " Maison Nucingen " claims that this guile dates from the next day of the Revolt of the Silk workers to 1831. He makes a mistake and the "*taking ounce*" became simply widespread, as expedient in the conflict of classes and interests. The foreman works in the high houses of the Croix Rousse (Red Cross, in Lyon). Streets were narrow and workshops needing light were placed in the superior floors, in full light. As Féral's magnificent carving shows it (to see in the top of the page), the lodging house of the boss worker constitutes at the same moment a family circle and a professional environment forming a quite inseparable. The foreman has in his service four or five companions. He lives rather bad but at the same time he is an aristocrat of the industry, having a difficult position among his companions and the manufacturers.

The foreman remains leaned in the lower middle class which maintains strongly the flame of 1789. Secret societies, *franc - masonry*, here is the school where he educated itself. From there this pride, these angers which turn easily in the violence.

Down still, thirty to forty thousand companions. Joseph Benoit speaks to us about them:

" The worker has only the arms which he rents unclearly in the course of the same year to several bosses. He can become attached nowhere, the industrial organization opposes to it magisterially. Similar to the roaming Jew of the legend, he should roam from a workshop to the other one without being ever able to settle in a stable way in anyone. The life, as that of the foreman, is a continual

trance, a constant apprehension of the future. It is never sure that the work which it do, of the piece of material which it makes. Once this work delivered and taken out of the hands, the foreman is free, and is obliged to try somewhere else to occupy the henceforth useless arms. And that often arrive, every other week... "

On November 21, 22 and 23, 1831 remain an exemplary date in the history of the silk trade of Lyons, but also in the social history of the western world. It is indeed in the capital of the silk that opens the era of the big fights workers of the XIX-th century. The contrast pushed to its paroxysm which reigns then between the various classes conduit inevitably in an explosive social climate.

The silk trade of Lyons could only aim towards a capitalist shape because the exercise of this art required a distant search for expensive raw materials and a prospecting of more distant markets for a production of material of very great luxury. These indispensable conditions demanding an important immobilization of capital, Lyon, as we saw it, see the constitution in the course of the years of categories as ill-assorted as opposite in the profession. To maintain the Factory in the prosperity, the manufacturers do not hesitate to quarter the silk workers of Lyon in their ancestral misery as well as testifies of it this text precursor of the capitalism of class, fired by " *Mémoire sur les manufactures de Lyon*" of Mayet, and quoted by Justin Godard:

" To insure and maintain the prosperity of our factories, it is necessary that the worker never grows rich, that he exactly has only what it is necessary him to feed well and indeed to dress. In a certain class of the people, too much ease softens the industry, engenders the idleness and all the vices which depend on it. As the worker grows rich, he becomes difficult on the choice and the salary of the work. The salary of the workforce once was increased, it increases because of the advantages which it gets... Nobody ignores that it is mainly in the low labour cost that the factories of Lyon owe their surprising prosperity. If the necessity stops forcing the worker to receive from the occupation some salary which one oggre to him, if he succeeds in getting free of this sort of servitude, if profits exceed the needs to the point that he can remain a little while without the help of the hands, he will employ this time to form a league. Being unaware not that the trader can not eternally do without him, he will dare to prescribe him in his turn laws which will put this one outside state to support any competition with the foreign factories, and of this reversal to which the prosperity of the worker will have given place, will result the total ruin of the Factory. It is so very important for the manufacturers of Lyon, to hold the worker in a continual need of work, never to forget that the low price of the manpower is not only advantageous by itself, but that it becomes it still by making the worker more laborious, more adjusted in its customs, more subjected to its wills... "

It seems evident that an industrial strife should burst sooner or later. In 1831, never the silk worker had had a more miserable condition and one labour more badly paid. It is of custom to say, according to the statistics, that on 1830 a worker does not gain the third party of what he gained in 1810, nor half of what he gained in 1824, for an always more tiring work; Mr Moissonnier speaks to us about this condition:

" From the dawn until in the middle of the night, the silk worker sits in front of the loom. One of its legs takes support on the ground, the other one activates a wooden pedal which lifts in due course warp yarns. Of the right hand he launches the shuttle, the left he moves the batten which tightens the weft and strikes regularly the front roller against which leans the stomach of the worker. "

Eighteen hours of labour in this awkward position are very exhausting: the attention should not loosen, the sight gets fast tired, especially during the hours of night when the only light results from a hazy lamp, a "*chelu*". The doctors the most qualified as Lyon think while the three quarters of the diseases from which suffer the workers of the Factory result from this abuse of night work. During eighteen hours, finally, the silk worker receives in the stomach the repercussion of the batten which strikes the roller of tissue and these repeated shocks oppose the digestion. It is classic to present the silk worker as a pale man, in the soft flesh, often deformed. In his book " *History of the Revolution* " Michelet write on their subject: " *Physically, it was one of the sickest races of Europe* ".

The conflict which, in fact, is only the rehearsal of the uprisings of 1744 and 1786, burst in the first days of October, 1831, when the " Echo of the Factory " publishes a letter sent to the prefect of Lyon, Bouvier-Dumolart, by the foremen announcing the constitution of a committee loaded with studying the construction of a rate of work, which of any times they tried in vain to impose. The prefect Bouvier-Dumolart, passing a rescuer with the eyes of the workers, eventually obtained on October 5 the signature of a collective agreement increasing the rate of the prices of work. Of Saint Jean in Croix-Rousse the shout of enjoyment spread as a powder trail: "*One has the rate, one has the rate!* " But most of the manufacturers did not feel engaged by the signature of their delegates and refused at once the new rate. After detention of the general of the national police, the strike turned in armed uprising. The City hall was occupied by the insurgents. Fast exceeded by the events, the foremen did not know more than to do of their victory, being any more bosses of companions who had "*nothing to lose and everything to win* ". Polices resumed the situation in hand and Lyon, occupied by marshal Soult, lives the solemn entrance of the prince of Orléans.

As for the prefect, he paid of his dismissal his relative benevolence towards the demands workers. The Rate declared invalid, sounded the knell of the immense hope that once more, the weavers had to succeed in building a more just society and to require a more decent life. The blood had poured, the amertune was in hearts. It did not stay more than to fire the lessons of a defeat. And nevertheless, aware of this defeat, the weavers of Lyons kept anchored in the heart of themselves the hope that one day would come, bearer of this justice and this propriety:

*Oh, please , Go through the history, and in the first times
Please , look there for you for wholesome lessons:
When these dark men who one names proletarians
Come to discover that tiny ranks
They can raise themselves on the size of the big,
That the bread belongs to the starving mouths,
Then, misfortune in all! Even if the armies
Under their artillery mutains gives up,
Their fall announces still of certain disasters.*

Such is the honoring returned to the silk workers of Lyon by Auguste Barthélémy.

III - THE SILK TRADE OF LYONS FROM THE END OF THE XIX-TH CENTURY TO OUR DAY

After the events which took place in Lyon in 1834 and were known under the name of days of April, the movement of emigration of looms towards campaigns becomes more marked.

As for the dispersal of the work with way outside Lyon, it ascend in the Revolt of the Silk workers and since had respite to increase, gaining at first campaigns of Lyons, then nearby departments. The manufacturers preferred to make work weavers spread and isolated in the surrounding campaigns either in small workshops steered by an affected, or at home. The loom at home was often then a complement to the works of the farm, authorizing a not unimportant contribution with the incomes of the farmers.

This tried tactics allowed so to the manufacturers employers, to assign lower salaries, without being afraid in counterpart of the reactions due to the dissatisfactions of workers grouped and organized in syndicates inside the city.

In Saint-Etienne, some "*passementiers*" had the idea to weave the romantic pictures of the painters of time, silk black and white. Real retorts of the photography, then rising and very fashionable, these pictures knew certain success. Curiously, the Jacquard mechanics which weaved them then works even nowadays in a few workshops near Saint Etienne.

In 1886, the City Council of Lyon, worried of protecting the seal of quality of the silk trade of Lyons, decides to create a brand in the weapons of the city, to allow to the buyers to recognize that the material was weaved in Lyon. This brand was the object of a control on behalf of a committee of surveillance based to deliver it to the manufacturers, and consisted of 54 members, manufacturers, weavers or inhabitants of the Town.

On September 29, 1901, one celebrated in the district of Croix-Rousse (in Lyon), the 500-th mechanical loom. This same day one inaugurated the statue of Jacquard , "*benefactor of the silk workers* ". In a book of 1933, Marcel Grancher, telling this day of double celebration, sends an imaginary message to the statue of Jacquard : " Good Jacquard , the bronze face of which is nevertheless so sweet, good Jacquard who, down from your granite pedestal, seem to smile to "*gonés*" (name done to the Lyon's children) surrounding, you had not certainly wanted what takes place at the moment. And maybe, please, say yourselves as well as, without the help of your mechanics which made possible the broadcasting of the textile industry, the silk workers would continue badly to live by pulling cords, but to live... ".

The crises succeed one another. In 1913, the " Condition of the silks of Lyon ", goes out of official body by where passed all the pure silk, weighed 8 145 144 kg of it. In 1931, this figure fell in 3 119 797 kg.

In 1916, Edouard Herriot (President of France) created the fair in the samples of Lyon, endowing the city of a invaluable instrument of economic expansion, while restoring her antique one and noble tradition. This fair which, besides a commercial place, was also and especially a place of meeting and confrontation of ideas, became quickly one of most important demonstrations of Europe. Every year in spring, it was going to carry the good name of Lyon in the four corners of the world.

Lyon is always the capital of the silk trade. It is not any more that of the silk. The used silk represents hardly 2 % of the weight of the materials today which are weaved there. The expression " weaving mill of silk trade " contains by extension all the materials with continuous fibers as the renamed artificial silk "rayon" since the law of July 8, 1934. For a long time the silk trade is not any more Mr. Bombyx's reserved domain. It is indeed in 1864 when the first artificial thread was made by the count Hilaire Bernigaud de Chardonnet. It is necessary to admit that the industry of the artificial fibers possesses its letters of nobility and is not absolutely an industry of replacement arisen from the war as one could suppose it. However, in 1864 , the artificial silk was far from being in the point. This thread was breakable, thick and of a shine... artificial! One could not decently present it as the future

replacement of the son of Bombyx! So one worried enough not enough its existence. Beautiful work of chemist, one agreed there. But who would not live...

It was there only the first one arisen from a numerous family. It had brothers and sisters, whom one saddened with barbaric names: viscose, acetate, cupro. One also forgot them in the big storm of 14-18. The silk reigned and Bombyx was still for the holiday. The progressing chemistry, the thread of artificial silk was improved. It is necessary to return to the silk manufacturers this justice: it was only with shyness, with disgust almost, that they made a small place to these turbulent children. Since 1930, the chemists eventually produced an impeccable thread having the flexibility and the touch of the pure silk. It is delicate to assert that the fantastic development of the artificial thread is one of the causes of the decline of the silk trade of Lyons. Because if it is indubitable that it without thread infinitely easier to work than the pure silk, the foreign countries would have had difficulty finding at home the competent manpower in the work of the silk, it is as indisputable as without the artificial cheap, more professions had been stopped in Lyon.

On 1920 , 1930, crazy years! Finally! Prestigious "novelties" of *Fructus et Descher*, *Ducharne*, *Dubost* and *Bianchini Fériér*. The modernism goes as far as being inspired by compositions of Raoul Dufy. It is the time of prestigious collaborations as that of Dubost and Ducharne. Michel Dubost, native of Lyon, should earn the keep and so reconcile this imperative and his attraction for the art. At the time of the administration of the silk and the weaving mill, he does naturally a professional activity of the drawing applied to the arts textile industries. In 1917, junior lecturer in the Fine art of Lyon, he tries to innovate in his class by respecting the personality of the pupil and by giving him the means to advance and to bloom. At the same time, a young manufacturer of silk trades in Lyon, François Ducharne notices his drawings and suggests him in 1922 reserving all his personal production of drawings textiles for the company Ducharne, and organizing in Paris a workshop of drawing by means of one groups of young draftsmen in the service of the same company. They will work together for 10 years for the fashion and the *Haute Couture*. It is the golden time of the illustrious dressmaker Paul Poiret that speaks to us about this artist's profession:

" A man of genius can not comply with the requirements of the business, which wants to retain only what can be profitable. So, the gardeners preserve on a tree only the strong branches of fruits. But an artist needs to grow all his branches; and even those that will produce nothing are valid for him. Who would dare to say that they will not give also results in a more distant future? For the artist, the useless is more precious than the necessary and one makes him suffer when one chooses in its work what is monnayable only. An artist has antennae which vibrate for a long time in advance and he anticipates the tendencies of the preference well before the vulgar. The public can never declare that he makes a mistake. He can do only an act of humility in front of the things into what he does not penetrate... "

In 1975, to the Historic Museum of Tissues of Lyon, was held "*crazy years of the silk* ", prestigious retrospective exhibition grouping together sketches and drawings of Michel Dubost and the pupils of the studio of drawing Ducharne. On the poster, an inscription of famous Colette:

**THE ONE THAT WEAVES THE SUN,
THE MOON
AND THE BLUE BEAMS
OF THE RAIN.**

And the arm silk workers?

Reader, look respectfully at this silk worker. You will not see it soon any more, already wrote in 1894 Nizier du Puispelu...

In the years 1950-1960, at request of the National Furniture which takes charge of the restoration of castles and national palaces, two manufacturers of Lyons raised each a workshop of arm Jacquard looms. Here, weave luxurious materials which adorn the castles of Versailles, Fontainebleau, Compiègne and most of the foreign palaces. These shaped materials very complex are reconstituted scrupulously according to the original drawings of time, minutely written in the feather on the books of orders of the manufacturers of formerly, and preserved today in archives. These books are themselves of real masterpieces of accuracy and manual dexterity. Materials which go out of these workshops can not be weaved mechanically because of the big number of complexions which compose them. The tissue created by Philippe de Lasalle for Marie - Antoinette's bedroom in the *Chateau de Versailles* contained 112 different nuances. Within his eight hours of labour daily, the silk worker weaved six centimeters of it...

In Lyon, the silk worker is one of the links of the long chain which participates in the preparation of a material, since the adaptation on the paper until that of the broadcasting. He does not proceed of the creation, does not take charge either of the warping, or the preparation of the loom. The role consists in weaving. It is only a weaver, but a weaver of talent having an absolute knowledge and a total mastery of its art. The draftsman in silk trade, the cards maker, the reader of drawing, the warping worker, etc. are so many specialists, so many links composing the same chain. Nothing of amazing in what the silk trade of Lyons was able to occupy the population of the whole city.

In the ancien workshops stayed such as they were one and a half-th century ago, one tinkers the last shuttle. Because this material very special is not indestructible and ran out. In the put rhythm rhythm the coupled mechanics, prestigious brocades of gold, silver and silk elaborate at the rate of some centimeters a day. The beautiful materials in the uncountable colours, wind imperceptibly on rollers.

In the workshop in the dented and patched floor, the sun hurls its beams on threads tablecloths in the colours of rainbow. And these rays of light spread out there in a puddle of light, incapable that they are to pierce the silk tablecloth the density of which often reaches the 130 threads the centimeter.

In winter, in the dark night, the workshop takes a supernatural dimension. In the sanctuary of the silk, only the individual lamps of the looms, which replaced the hazy " chelus " with oil of former days. Spectacle fascinating of silk warms and face consciencieux of the silk worker tilted to its batten, which only emergent of the total darkness.

The last representatives of the profession look like local curiosity today. Where are so gone the forty thousand professions of Lyons which beat in 1890 ?

Dozens looms of Lyons were burned. One meets still in campaigns some frames supernaturally survivors. They are barded by boards and do, it seems, of admirable chicken runs... If the mechanical silk trade of Lyons has maybe another future, the adventure of the silk worker ends here.

How do not to regret that any last arm looms are only dedicated to redo the former materials, denying so several centuries of creation. Imagine that a school can introduce young weavers motivated to these ancestral techniques, on this old charming and loaded with material of glorious past one, may put these techniques in the service of the contemporary creation of silk trade, seem to be an absurd idea, and however, it is not there all the tradition of the silk trade of Lyons ?

Philippe DEMOULE.

So ended in 1979 this series of three articles. Twenty years happened. Twenty years, it is indeed few things in the long history of the silk trade of Lyons. Twenty years, it is what it was necessary to put it in ground and bring down it.

There will be so soon a fourth sector in this series which will there be sad epilogue, even its epitaph... But if the silk trade died, all the old arm and mechanical looms did not keep silent. Some guardian angels, by this and there ate still here, and we shall speak to you about them soon.

Thanks to our friend Alfred from San Francisco, for his competent translation from french to english.