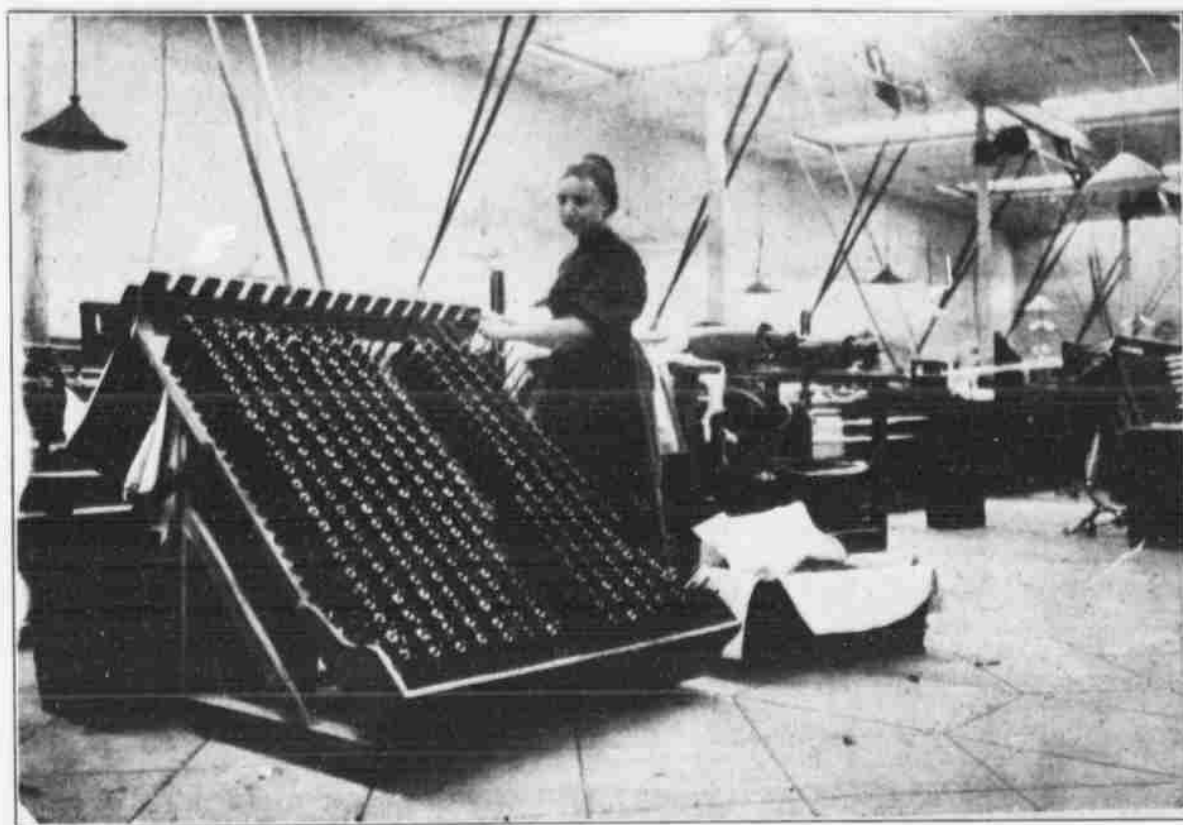


Lyons--The Velvet Metropolis and Its Factories



SILK WORKERS ARE BARE-ARMED, BARE-HEADED GIRLS.



IN THE SILK REELING ROOM.

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LYONS, France, Oct. 15.—Special Correspondence of The Bee.—I am in the silk center of the world, where for more than four centuries the finest gowns of the belles of all nations have been turned out on common hand looms. Lyons makes about \$90,000,000 worth of silks and silk goods every year. Its satins and velvets go all over the world, and within the past few months it has been busy making the rich red velvets which were worn at the coronation of King Edward VII.

The city is the commercial center of middle France, and, next to Paris, the chief city of this republic. It took me eight hours on the railroad to cover the 200 miles between here and Paris, and I now find myself in the rich valley of the Rhone, in one of the most beautifully located of cities.

Lyons is surrounded by hills. It lies on the lowlands, under the mountains, at the confluence of the Rhone and the Saone. On the other side of the Saone are the Heights of Fourvieres, with a great tower upon them, up which we shall climb for the view. We walk through the town, passing the site of a Roman palace in which the most cruel of the Roman emperors, Claudius and Caligula, were born; we go over one of the Saone bridges and by a cable railroad are elevated to the foot of the tower. Another elevator takes us to the top, and we are 600 feet above the river, hanging, as it were, high over the city. Behind us are the Golden mountains of Lyons, and beyond them, over a valley of gardens and trees, are the mighty Alps, their snowy peaks forming a ragged silver mass against the clouds. The day is clear and we can see the snowy cap of Mont Blanc 100 miles away. Turn about now and look down into the valley. There is the Rhone, fresh from its glacier cradle in Mont St. Gothard, and nearer still, flowing almost at our feet, is the Saone, winding about through the town side by side with its twin sister, the Rhone. Between the two is the greater part of Lyons, and as we look we see the silvery streams embracing the municipal maiden in her silken clothes and going singing on together to the sea.

Stop a minute and think where we are. We are in the heart of one of the oldest parts of Europe and on the site of one of the most famous cities of France. This Rhone valley was a trade route in the days of Julius Caesar and great fairs were held here in the middle ages, to which merchants from Amsterdam to Venice and from other parts of Europe came to buy and sell. The Gauls had a town on this site 600 years before Christ was born and at the time Christ lived here was a Roman city. On this very hill one Roman emperor caused 20,000 Christians to be massacred and in the days of the French revolution the Tribunal, finding that the guillotine would not kill the Lyons aristocrats fast enough, tied them together with ropes in rows of sixty and executed them by wholesale with cannon loaded with grape shot.

The Lyons of today, however, devotes itself more to business than to politics or religion. It is a great manufacturing center. It contains 500,000 people and with its suburbs has about three-quarters of a million. Standing here on the tower you can see the smokestacks of its car shops, tanneries and chemical works and there, across the valley, on the other side, is the famous Croix Rousse (Red Cross), the hill where the silk makers live, where the fashions of generations have been woven and where today some of the most beautiful cloths of the world are produced. The hill looks but little like a manufacturing center. It has no vast brick buildings, walled with windows, such as you see in the factory towns of our country; it has no smokestacks pouring volumes of black into the clouds and



GENERAL VIEW OF LYONS FROM FOURVIERES.

it looks more like a residence section than an industrial one. Still Lyons has hundreds of silk factories and the most of them are situated upon that hill.

Suppose we visit it. We descend by the Saone, cross the bridge and take the trolley car through the city to the cable station at the foot of Croix Rousse. We go into the car, dropping a sou, or 1 cent, at the turnstile, for that is what is charged for the ride. We enter a box car where a score of silk workers are standing, and in a moment find ourselves riding to the top of the hill. A few steps from the station above takes you into the heart of the silk industry of Lyons. We can tell it by the click! click! which is heard on every street and in every hallway. The houses are lean five-story structures, built along alley-like streets, with narrow entrance doors. They look like tenement buildings and they are indeed little more than tenements, great beehives filled with laborers, every cell of which is a little factory. Most of the work in the great silk department of the Rhone is done on hand looms, and there are 400,000 men thus employed in this department. Even where power looms are used the work is largely that of house industry, several weavers having, in a single room, looms worked by electricity, paying therefor a few cents per day per loom.

We enter one of the buildings and walk up the narrow stone stairs. We hear the clicking going on as we mount from story to story. The building is rudely constructed and without modern conveniences. We knock at a door, pounding loudly in order that we may overcome the noise of the weaving. A Frenchman in his shirt sleeves, with a cap on his head, opens the door and asks us to enter. He has just left his loom and at our request he again goes to work. The loom is old-fashioned, and he works it with his feet, throwing the shuttle by hand from one side to the other through the silk threads. He is making a pattern of dress goods which may eventually be worn by some of the four hundred, or may shelve perhaps on a Virginia belle at a White House reception. I ask him his wages. He replies that he earns 3 francs and a half, or 70 American cents, a day of eleven hours. He has been working at his trade

ten years, and is one of the best paid men in the building.

Going on, we enter room after room. Each has one or more looms, with bare-armed, bare-headed men and women weaving away. All kinds of silks are turned out and the wages in all cases are low. The men earn on an average 60 cents a day and the women 48 cents. The best workmen sometimes earn from \$1 to \$1.25 and a very few as much as \$2.40, or 12 francs per day.

In some buildings we find the looms worked by electricity, the lightning having been called to make broads and silks for our women's dresses. The electricity is furnished by a society at such a rate that a man gets electrical power for 5 cents a day and pays for his loom on installments. With such looms the men can make better wages, working in the same room in which their families have been living and working for generations.

I have talked with many of the silk men of Lyons, both factors and laborers. I find a general belief that the days of such house industry are numbered. Lyons has been gradually losing its standing as the chief silk-making center of the world. Other countries are coming into competition with it, and its trade is slowly but steadily falling. Germany is making beautiful silks with the best of modern machinery at Krefeld, not far from the left bank of the Rhine; the English have long been known as makers of fine silks, the Russians are doing some wonderful weaving near Moscow and the Italians are rapidly regaining the place they held in the middle ages as one of the chief silk-manufacturing peoples of the world. It used to be that the most of the raw silk brought from China came to Marseilles; a large part of it now goes to Genoa on the North German Lloyd Atlantic lines, and the output of Italian silk goods steadily grows.

The United States, however, is injuring the trade of Lyons more than any of the European countries. Before our civil war we annually contributed about \$30,000,000 to the Lyons silk weavers. Now we make 90 per cent of the silk we consume, and, notwithstanding our enormous increase in wealth and population, our Lyons purchases

do not amount to more than \$10,000,000 a year. The French writers claim that the falling off in their trade is due to our protective tariff, which has built up the silk industry of Paterson and other American cities. In these places the silk is made in large mills, and the cost is so reduced that American commercial travelers are now selling American silks in Europe. We already weave two-thirds as much silk as France and our silk exports may yet become one of the features of the American commercial invasion of Europe. I am told that a number of the French factors have already removed their plants to the United States, and that others are remodeling their mills on the American plan.

I visited this afternoon the biggest silk mill of this country. It has 420 looms and two or three times that many employees. The hands are bare-armed, bare-headed girls, well dressed and in many cases good looking. They are the daughters of the men who work on the house looms and are the descendants of many generations of silk weavers. The mill is somewhat like a great cotton factory, save that more bright colors are used. In the reeling room the threads are of all the hues of the rainbow, and the thousands of spools make a maze of brilliant tints and shades. The factory is well lighted, and it is equipped with all the modern conveniences of our factories. The wages are very low and there is no trouble in getting employees.

I was interested in the velvet works. The finer of such goods are made by house industry, although power looms are generally used. The weavers have found they can not make wages by using their old hand looms and they have had them remodeled so that they can now earn 75 cents and upwards per day. Much of the velvet woven in Lyons is brocade, and that in most beautiful patterns. Silk and velvet curtains are made, some of which cost as much as \$800 a pair. I saw velvets today which sell for \$70 a yard, and was shown curtains which require four months to weave. The finest of the velvets are made in these little rooms.

The velvet is woven about wires, the threads being cut through to the wires with a knife and the wires taken out. The vel-

vet has to be made thread by thread, each line being cut separately, so that a slip of the knife would ruin the cloth.

I visited one factory which made 8,000 yards of red velvet to be worn at the coronation of King Edward, and another where I was shown specimens of furniture coverings made for one of the Vanderbilt families at a cost of \$21 a yard. Think of paying \$21 for a chair seat! And this is what the stuff costs in France. The price will be doubled by the time it gets into one of the Vanderbilt palaces and is fitted on to its luxurious sofas. Every time one sits down upon it he or she will cover a yard of it. It would make me uncomfortable to sit down on \$42 at one time.

The very best of the French silks seldom get to the United States, as our duties make them almost prohibitory. Velvets which will sell for \$4 a yard in Lyons would cost \$10 a yard in New York and silk broads at \$5 a yard would be doubled in price after they had passed through our custom house and paid the charges of the middlemen.

I have gone through some of the largest of the Lyons silk stores. They are to be found in buildings not unlike factories. You enter an unpretentious stairway and on the second or third floor may find a door with a little brass sign marked with the name of the merchant. Entering you come into large rooms with long counters running through them. There is no silk on view, for the goods are stored away in cases or drawers until brought out for customers. The rooms are well lighted and parts of them are walled with mirrors in order that the colors may be shown by reflected as well as by direct light. Some of the oldest styles are the most beautiful, and these are repeated from age to age, new designs are being continually invented and the greatest artists of France are engaged in designing. The French are noted as designers, and they have schools here which teach designing. Some of the factories make pictures in silk both for the decoration and wall covering. The faces of the most noted men of France are thus woven as well as fancy pictures of all sorts.

Lyons is doing all it can to foster its silk industry. It has its technical schools which teach all branches of silk manufacture. Young men come here from all parts of the world to study how to make silk, and many work in the mills for that purpose. There is one school which charges from \$80 to 1,200 francs a year as tuition. The \$80 francs is the charge for Frenchmen and the 1,200 francs that for foreigners. In this school the best of modern silk weaving machinery is used and a great part of it bears the mark of American manufacturers. An American sewing machine sews the pattern cards together, and American methods of weaving are employed. All kinds of silks, velvets, plain and figured goods are made here, under the superintendence of the most skilled workmen, the boys doing the work themselves with the professional silk men as overseers.

I visited the Lyons municipal silk school, on the Croix Rousse, after going through the silk factories of that neighborhood. This school is sustained by the city, and is open only to Lychennese youths. Any Lyons boy who has reached the age of 15 can enter upon the payment of \$1.73 and learn all about silk weaving, designing and pattern making. The course of day study is ten months, and there is in addition a night school, in which a course of three years is required.

There are about 300 pupils in this school. They belong to the rich and the poor, many of them being the sons of common laborers. Every boy has to keep a diary of his work, with the patterns of the silks he has made, and also copies of his designs. The school teaches all matters about the breeding of silk worms as well as all kinds of weaving and designing. The professor in charge, a kind looking old Frenchman, wearing a

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