

A SMALL LEATHER FACTORY

*In what ways would you expect a small factory to be different from a large factory?
Discuss in your class.*

You visited a large leather tanning factory in the last chapter. There are also small leather-making factories. Our friend Bakku mochi introduced us to Kaka who has been working in a small leather tanning factory for many years. He took us to see this factory.

The factory was tucked into a bylane of a mohalla in the town. You would never have guessed its existence while walking through that mohalla. On hearing the word 'factory' we had imagined it to have a big gate and building. But all that we found was just another big house of this mohalla. From the smell first we thought it was some government dispensary or an animal pen. The factory was made up of a couple of large rooms before which stood a heap of hides. To one side there was a tank of water.

- *Can you recall the five steps for processing hides from the previous chapter?*

Let us examine how this processing is done in a small factory:

Cleaning

This is done in the first of the four tanks in the factory. Raw hides have dirt, blood, etc. on them. To remove this, they are soaked in a soap solution. They are turned around by hand.

Removal of Hair

After being cleaned the hides are put into a tank with lime solution. Soaking the raw hides in this for about four days loosens the skin hair. The hair is then removed with a small scraper. The whole process takes around six days.



Fig. 1 Kaka turning over the hides

Neutralizing the Lime

Before the hides can be tanned all the lime must be removed from them. An acid solution is made in a tank and the hides are put into it. They are occasionally stirred and turned about. The acid neutralizes the alkaline lime and frees the hides from it.

Tanning

This is the most important part of the process. The tanning of hides makes them flexible, strong and long-lasting. Tanned hide is what we call leather. For this substances of vegetable origin like the bark of the *babul* or the *ghabor* are ground and mixed with water. This solution is added to a heap of hides in a tank and they are allowed to soak it in. Every third day the hides are turned around.



Fig. 2 Sprinkling salt over the hides

Kaka entered the tank before us and began to take out the hides from the bottom and place them on top. It is essential to turn the hides around like this. This is to ensure that the solution is adequately and evenly absorbed. The hides are soaked like this for 15 days. In between the entire solution is also changed once.

This factory uses plant products to tan the leather. That is why this process is called 'vegetable tanning'.

Making the Leather Soft and Flexible

When the hides become hard and difficult to bend it means they are fully tanned. Now they are washed and dried. Such hard leather is of little use to people so it has to be softened by being soaked in oil, water, gur, etc. Castor oil is also used for this.

The entire process, from cleaning to tanning and making it soft and flexible takes about a month. This is the time it takes for a batch of hides (20 to 25) to be processed. "If we have orders," Kaka explained, "we can produce four batches a month." These days we don't get much work. Daily-wage labourers are often not employed for many days.

- Give two examples from the small factory where work is done by hand instead of by machines.
- Read the description of the process of hair removal in both factories once again. What is the difference between the two?
- What is the advantage of using sodium sulphide?

The Differences between Small and Big Leather Tanning Factories

The big factories can produce more. The factory which we had seen could produce leather from the hides of 7000 goats and sheep every day. Kaka's small leather factory can make very little leather. It can process just 100 hides every month.

Big factories have large tanks with mechanised paddles, hair removal machines and automated rotating drums. In contrast, the small factories have only a few small tanks. The large drums of the big factories are able to process large batches. The batch size for the big factories was around 200 to 300 hides, whereas the batch size for the small factory is around 20 to 25 hides. The slowly rotating drums helps the solution to be absorbed faster and more evenly. In the small factories the hides are turned around by hand. The use of synthetic chemicals also reduces the time required. If, like in small factories, the bark of the *babul*, etc. were to be used then the hides would have to be soaked in this solution for a longer period. A batch which takes 25 days to process in a small factory takes only 4 to 6 days in a large one. It is because of these reasons that the large factories are able to produce much more.

- Can you identify 3 different reasons why a large factory is able to produce more than a small factory.
- Some experts from the Central Leather Research Institute in Chennai who visited Kaka's factory suggested that

they should procure one rotating drum and use this for the main tanning process. How will this increase the production? Explain.

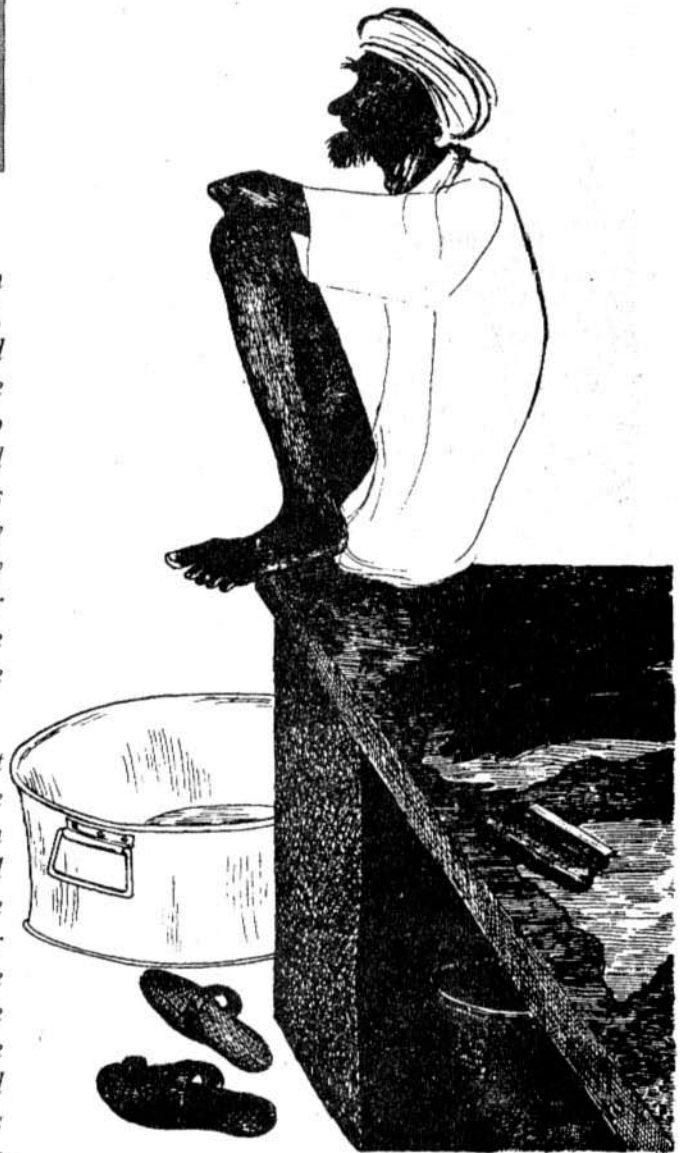
Work in a Small Factory

Two persons were piling raw hides one on top of the other. To keep the raw hides fresh, salt was sprinkled on them and spread between different layers. Kaka told us, "We have selected the better hides for sending to Kolkata. Those are very good hides. They will be processed by large factories. In this factory we tan somewhat inferior hides. Only cobblers and small traders come to buy finished leather from us. Our tanned leather is good enough for their use. Besides, the better hides fetch a good price from the large factories."

We asked Kaka to tell us something about himself and the other people working in the factory. "We come to the factory at 8:30 in the morning," he started, "and stay here till 5 in the evening. I and another man come here every day. We are the only regular employees of the factory. As and when there is leather to be tanned more workers are hired. They are paid on a daily basis. There is some specialized work which only I and my other regular colleague can do. That is why we are regular employees. We also have to supervise the work of the others."

Leather workers have to work in rather filthy conditions. All day they have to stand in dirty water and have to endure the foul smell. "Why don't you ask the owner to give you plastic gloves and boots to protect you from the dirty water?" we said to Kaka. He replied, "The owner does not bother about our comfort. And if we do demand anything from him we will only lose our jobs. We get Rs 80 a day and that is enough!"

• What is the difference between the workers in a small and a big factory?



Pollution in the Factory

When the waste water of the factory is discharged it has to flow through the entire neighbourhood. The residents of this area have complained of the smell and the likelihood of pollution of drinking water sources. The owner of the factory was fighting a case with the municipal committee over this.

The municipal committee said that the factory should be shifted out of the town. It should not be in the middle of a residential area. The owner said that he should be given some compensation if he were to be forced

to shift. When he set up this factory 30 years ago there was nobody in his neighbourhood. Now if people had come and settled around him that was not his fault but the fault of the Municipal Committee which had allotted the residential plots.

The owner of this factory had come here 40 years ago from Kanpur. He had started this work with his father. At that time this town had had only two leather factories. Gradually the mohalla came up around this factory. For many years there was a good demand for leather. Now the demand for leather from big factories had taken over the market and this factory was unable to earn much profit.

Kaka said with a grimace, "There is no life left in this profession" and began to hum a song.

Decline in Demand

Kaka explained that the demand for the leather produced by their factory had declined substantially. Cobblers used to buy their leather for their repair work and for

the soles of the shoes made by them. However, a large number of people especially in rural areas, are using plastic shoes instead of the traditional leather shoes – juti. This drastic decline in demand for leather shoes has in turn reduced the demand for leather. Besides even for minor repair work cobblers are increasingly using the leather made in large factories. The demand for the leather of these small factories is thus further reduced.

There is a demand for the vegetable tanned leather by those who make special belts used in some machines. The factory owner is thinking of changing the production process somewhat so that the factory can produce these specialised items of good quality. However he was not sure if he would be able to get regular orders for the new product. He is hoping that the government would help in marketing these special items. He is therefore in a dilemma whether to close his factory or change the production process (like buying a rotating drum) to make special items.

EXERCISE

1. Why does this small factory produce less than a big factory? Explain with reasons.
2. How many kinds of workers are there in a small factory? What do they do?
3. What are the problems faced by workers in small leather factories?
4. What has been shown on figure 3 on page 119 and figure 1 on page 125? Is the same kind of work being done in both of these? What is the difference between the two?
5. Several drums can be seen in the figure 2 on page 119. Are these also present in small factories? How can production be increased with the help of these?
6. What are the complaints of the people living in the mohalla? In your opinion what should be the solution of this problem?
7. Several small factories are slowly closing down. Discuss with your teacher the reasons for this. What should be done in this regard. Explain your answer.
8. What are the advantages and disadvantages of using traditional leather shoes and not plastic shoes. Discuss and explain. How has this affected the work of small factories?
9. You have read about the contract system in the beedi industry. Many small factories work on a contract basis with large factories or traders. Find out some examples.

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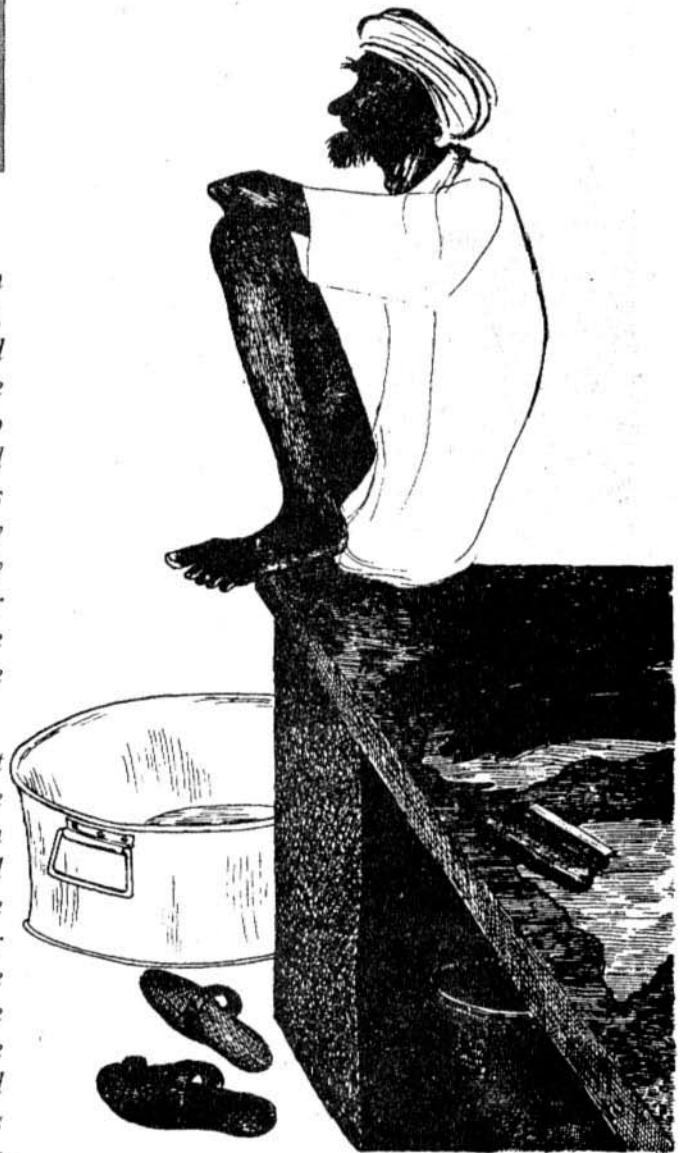
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