

I. Dynasty 89

Chapter 89: Glass

“Your Highness... this commoner is willing!”

Fan Zeng was visibly excited. He had lived an unremarkable life and never imagined that such an opportunity would come to him in his later years. If he didn’t seize this chance now, when would he ever get another?

“Good. The newspaper office in Bowen Academy will be completed by the end of the month. Although it will be somewhat rudimentary, it will be ready for use by then. You can start selecting the staff for the newspaper office now. Here is a document outlining the structure of the newspaper office. Take it back and review it.”

After saying this, Xiao Ming instructed Luluo to fetch a manuscript from his chambers. This document was Xiao Ming’s blueprint for the newspaper office, based on modern newspaper organizations but adapted to the realities of the Great Yu Empire.

Once the newspaper office was established, the newspaper delivery boys would no longer exist. Instead, they would be renamed “reporters.” However, these reporters would not only gather news but also continue their duties of reading newspapers in the villages.

The newspaper office would be divided into departments such as the printing department, editorial department, and logistics department, essentially forming the foundation of a modern newspaper organization.

Through his interactions with various people in the Great Yu Empire, Xiao Ming had come to realize that the ancients were not unintelligent—they simply lacked exposure. Once these matters were explained to them, they could quickly adapt and apply the knowledge. In any era, one should never underestimate the creative potential of the human mind.

It was precisely because of this that, under Xiao Ming's encouragement, the Machinery Department, Bowen Academy, and the workshops gradually began to open their minds. They were no longer confined by outdated cultural norms. The introduction of novel ideas encouraged them to experiment and learn scientific knowledge, helping them understand that technology was a driving force of productivity.

Xiao Ming deeply felt that whether a civilization could usher in a new era of progress depended entirely on the guidance of the ruling class. The source of this guidance was the rulers themselves.

From the First Emperor of Qin burning books and burying scholars to the literary inquisition and the suppression of all schools of thought except Confucianism, the rulers of feudal dynasties had always sought to keep the people ignorant in order to maintain their power.

The sole purpose of scholars was to become officials and uphold the ruling class. For thousands of years, the elite of feudal dynasties pursued nothing but high-ranking positions.

The emergence of the newspaper was Xiao Ming's opportunity to change this stagnant cultural atmosphere. A renaissance could very well emerge in his fief.

Now that the director of the newspaper office had been appointed, the next step was to systematically establish the newspaper office. With his guidance, the newspaper office would not go astray.

Fan Zeng returned home as if in a dream. Facing his usually harsh wife, he now stood tall and proud. He had been personally appointed as the director of the newspaper office.

After sharing the news with his family, everyone was overjoyed. Fan Zeng's wife, Madam Sun, even killed a chicken to celebrate. After decades of hardship, Fan Zeng finally had his moment of triumph.

The changes in Qingzhou were like a gentle spring rain, quietly permeating every corner.

Fan Zeng was just one of many who felt this transformation. Most people were unaware of the profound changes happening around them, but to outsiders, the changes in Qingzhou were glaringly obvious.

For example, merchants from other regions found Qingzhou's developments almost unbelievable. However, their primary focus was on the industrial district hidden behind tall walls.

Despite their best efforts to uncover its secrets, they had learned very little, only discovering that many strange machines had appeared in the industrial district.

And now, Qingzhou had introduced something called a "newspaper."

Naturally, these merchants immediately wondered if the newspaper could be profitable. They had developed a habit of thinking this way whenever Prince Qi introduced something new.

However, after observing for several days, they regretfully concluded that it was not profitable. The cost of producing the newspaper far exceeded its selling price, and very few people were buying it.

“Sigh, it seems Prince Qi hasn’t come up with any new money-making ideas for a while,” a merchant lamented in a tavern.

The merchant sitting across from him replied, “With soap, perfume, and ‘Drunken Qingzhou,’ Prince Qi has already made a fortune. Add to that Li Kaiyuan’s promotion of these products, and the sales of these three items have skyrocketed. It’s said that Prince Qi now earns millions each month. Does he really need anything else?”

“That’s true, but the merchants staying in Qingzhou still feel a bit disappointed. After all, some merchants got a head start on these products, leaving little for the latecomers,” the merchant said, then picked up the latest issue of the newspaper and began reading.

When he reached the article at the bottom of the page, his expression tightened.

The article mentioned that Prince Qi was currently leading a group of craftsmen in the Machinery Department to produce something extraordinary. The article didn’t provide many details, only stating that merchants should wait and see.

This news spread like wildfire among the merchants, who now began to take the newspaper seriously. They hadn’t expected such valuable information to be found in it.

For a while, merchants in Qingzhou City were abuzz with speculation about what Prince Qi was working on.

The only clue they had was that Prince Qi had collected a large amount of sand from the riverbank.

Sand? The merchants were puzzled. What could it be used for?

For modern people, it would be obvious: sand can be used to produce glass.

This was precisely Xiao Ming's next project. In truth, Xiao Ming wasn't producing glass purely for profit. His main goal was to use glass to create items like telescopes and chemical instruments.

The chemistry laboratory needed these tools to purify substances like alkali. Most importantly, Xiao Ming had already gathered all the materials needed to produce glass.

It was like collecting the dragon balls—it was time to summon the dragon.

Sand, limestone, and soda ash were the ingredients needed to produce soda-lime glass. The silicon dioxide in the sand, the soda ash to lower the melting point, and the limestone to provide calcium would combine to create a clear, transparent glass.

This was the material needed for chemical instruments, beakers, measuring cylinders, test tubes, and more. With these tools, the chemistry laboratory would be fully functional.

With the materials gathered, the next step was melting. The formation of glass required a temperature of 1,300 degrees Celsius, similar to the temperature needed for coking. To achieve this high temperature, Xiao Ming had to design a specialized device: the regenerator.

The regenerator was a brick structure, typically consisting of two chambers separated by a furnace. The two chambers were filled with checker bricks, and air was blown through them to exchange heat in the furnace, thereby increasing the temperature inside.

Previously, without bricks, Xiao Ming hadn't been able to use regenerators. But now, with bricks and manpower available, it was time to upgrade. Whether it was blast furnace iron smelting or coking, regenerators were being constructed.

As a result, the quality of coke improved, and so did the quality of iron. Glass was fortunate to benefit from the regenerator furnace from the very beginning.

After teaching the craftsmen the basics of glass production, Xiao Ming had them mix the materials and throw them into the furnace. Once the glass liquid was produced, it was time for annealing and blowing glassware—a process that could only be done manually.