

I. Dynasty 95

Chapter 95: The Chemistry Laboratory

“Precisely for this reason, I want you to establish a cavalry unit. At least for now, the best way to deal with cavalry is still cavalry.”

Historically, cavalry was not phased out until the advent of mechanized forces. Therefore, in Xiao Ming’s view, the army would need to focus on building a strong cavalry unit for a long time to come.

Lu Fei nodded. No matter how excellent infantry formations were, they could only be used for passive defense. Cavalry, on the other hand, was an offensive force, essential for its flexibility, mobility, surprise attacks, and pursuit. He said, “If that’s the case, then a thousand warhorses are still too few.”

“I understand. Next, I plan to smuggle horses from the grasslands to try and build a qualified cavalry unit,” Xiao Ming said, frowning slightly.

Even in the age of firearms, the role of cavalry was irreplaceable.

“Smuggle?” Lu Fei was taken aback. Then he said, “Your Highness, are you not aware that the barbarians have now strictly forbidden the grassland tribes from selling warhorses to the Great Yu Kingdom?”

“Of course I know. Otherwise, it wouldn’t be called smuggling, but trade,” Xiao Ming replied.

Lu Fei scratched the back of his head, then his expression turned serious as he said to Xiao Ming, “Your Highness, the barbarians suddenly tightening the sale of warhorses is not good news. In the past, every time they did this, it meant they were preparing to attack the Great Yu Empire”

“That’s what worries me too. So this time, even if it’s at a high price, I plan to buy a batch of warhorses,” Xiao Ming said. “Moreover, the walls of Cangzhou City need a major overhaul. Once the slaves donated by the merchants arrive, I plan to have them rebuild Cangzhou City, turning it into an impregnable fortress that the barbarians cannot breach.”

Lu Fei was excited. “Your Highness, are you planning to use cement this time?”

Xiao Ming nodded. “Yes, the fragile walls of Cangzhou City need to be reinforced.”

After discussing this matter, Xiao Ming and Lu Fei talked about the new armies in other states. These new armies were currently led by the core members of the Qingzhou Army, with no involvement from the powerful local clans.

Moreover, each army had a political officer in place, responsible for the ideological work within the troops.

When the topic of the political officers came up, Lu Fei looked pained. “Your Highness, these political officers are always talking about how the army must remain loyal to you, how they must uphold your leadership, and they even came up with things like ‘Eight Honors and Eight Shames,’ ‘Eight Disciplines,’ and ‘Seven Points of Attention.’ It’s really something.”

“What’s wrong? Is there a problem with the army being loyal to me?” Xiao Ming glanced sideways at Lu Fei, thinking to himself that if this guy had any disloyal thoughts, he would have to deal with him too.

Lu Fei immediately broke into a cold sweat. He was just being blunt and didn't like the overly meticulous ways of these scholars. But he realized he had misspoken and quickly bowed. "Your Highness, please don't take offense. I'm just a loudmouth, always saying the wrong things."

"That's more like it. I don't mind your usual antics, and I try to meet your demands for equipment, but when it comes to matters of principle, you need to be clear-headed." As soon as Xiao Ming spoke, his tone shifted to that of a political officer giving a lecture.

The political officers who had been recruited were not allowed to take up their posts lightly. They had to undergo training and pass an exam before they could be assigned. The content of the exam was the guiding ideology of the army. Xiao Ming's goal was to maintain control over the military. In these turbulent times, it was easy for armies to be led astray by their commanders, so this method was necessary to strengthen control.

Otherwise, if one state rebelled and another mutinied, it would be enough to give him a headache.

"I wouldn't dare, I wouldn't dare. I wouldn't have the courage even if I had ten guts," Lu Fei said.

Xiao Ming nodded. "I know you must find the political officers annoying, but just ignore them. They won't interfere with your military affairs."

"Yes, Your Highness."

Lu Fei wiped the sweat from his brow and personally escorted Xiao Ming out of the military camp.

As he watched Xiao Ming leave, Lu Fei let out a sigh of relief. In his eyes, the current Prince of Qi was becoming more and more enigmatic, but he had to admit that his methods were effective.

In the past, many soldiers didn't even know who the Prince of Qi was. But now, with the political officers in the army, they heard about the Prince of Qi almost every day.

In Lu Fei's view, this wasn't necessarily a bad thing. It ensured the stability of the military forces across the six states, preventing a situation like the one in Cangzhou City, where the local clans controlled the city's defenses.

Meanwhile, Xiao Ming left the military camp and headed to Bowen Academy, where the newspaper office was now under the supervision of Fan Zeng. Every day, Fan Zeng collected information and published the next day's edition of the newspaper.

The paper-making and printing workshops had already been moved to the industrial district, so Fan Zeng only needed to send people to coordinate directly.

Xiao Ming had already taught Fan Zeng how to handle the specifics, so he didn't need to micromanage. He only needed to review the drafts each day.

After all, as his responsibilities grew, so did his daily administrative workload.

He had to oversee industry, commerce, and agriculture. Building industry, farming the land—it all required careful attention.

As he walked, Xiao Ming arrived at Bowen Academy. He wasn't here to see Fan Zeng but to conduct his regular teaching duties.

In his spare time, he often spent his days at Bowen Academy.

There were the political officer training sessions, the shipbuilding projects led by Zhang Liang, the technical challenges faced by Chen Qi's machinery department, and the chemistry lessons for Lu Tong and his group.

This time, he was here to conduct a chemistry experiment. After the production of glass, he had the workshops create a set of chemical instruments, which were now all in the laboratory.

By now, Lu Tong and the others had a solid foundation in basic chemistry. They had memorized the periodic table and were familiar with chemical formulas.

The theory was there, but practical application depended on these chemical instruments.

When Xiao Ming arrived at the laboratory, Lu Tong and over two hundred others were waiting inside. Upon seeing Xiao Ming, they respectfully greeted him with, "Your Highness."

The chemistry laboratory was laid out in a modern style, with five-person workstations below, each equipped with experimental instruments.

Xiao Ming stood at the front, where he also had his own set of instruments.

This time, Xiao Ming was going to teach them how to produce sulfuric acid. The “three acids and two alkalis” had always been a goal for Xiao Ming in establishing a basic chemical industry. The three acids were nitric acid, sulfuric acid, and hydrochloric acid, while the two alkalis were sodium hydroxide and sodium carbonate.

Considering the conditions of this era, he believed that producing sulfuric acid would be the easiest to achieve.

In ancient times, there was something called “green vitriol oil,” which was essentially sulfuric acid. It was made from green vitriol, water, and high heat.

According to the data from the tech crystal, there were deposits of green vitriol, or iron(II) sulfate, in his territory. These green vitriol deposits were often found alongside iron ore.

While mining for iron, Qian Dafu had discovered these green vitriol deposits. Xiao Ming felt that these resources shouldn't go to waste and decided to use them to produce sulfuric acid.

After all, sulfuric acid had a wide range of industrial applications, one of which was acid washing to remove rust, which could extend the lifespan of machinery. Additionally, sulfuric acid was a solvent used for purifying metals.

With sulfuric acid, he could purify some rare metals, laying the groundwork for alloy production.