## I. Dynasty 292

Chapter 292: Gathering the Craftsmen
At Laizhou, Qian Dafu drank some water as he watched the slaves busily working.
He had been shouting commands all morning and his throat was already hoarse, overseeing the construction of various facilities within the mining zone.
To quickly transport tungsten powder, some slaves had already begun digging for ore, while others were working on sorting—enriching the tungsten powder from the soil.
"Second Uncle, His Highness has arrived," a young man ran up to inform Qian Dafu.
"His Highness is here?" Qian Dafu nearly leaped from his chair. He said to the young man, "Qian Gui, when His Highness arrives, don't speak out of turn. Let me explain to him about sending you to Bowen Academy."
"I'll listen to you, Second Uncle," Qian Gui nodded, a hint of expectation in his eyes.
Just then, a group of armored cavalrymen appeared at the mining area. Their imposing presence made it obvious—they were Xiao Ming's personal guards.
Seeing them, Qian Dafu quickly rushed forward. He immediately spotted Xiao Ming, surrounded by guards.

"Your Highness! What brings you all the way out here?" Qian Dafu greeted him warmly.  Xiao Ming smiled and said, "Came to have a look. Also brought you the slaves Liang Dahai bought from the steppe—five thousand strong men. Should be enough for now?"
Qian Dafu glanced at the group of slaves under guard and grinned, "Oh, Liang Dahai finally wised up. These are all sturdy ones! Five thousand of them are worth more than ten thousand from before."
"If he hadn't wised up, I'd have sent him home to farm," Xiao Ming said, dismounting.
Passing by Qian Dafu, Xiao Ming looked toward the slaves digging at the bottom of the pit.
Mining had always been grueling work, especially without modern machinery. Everything had to rely on human labor—chiseling and digging. A single metal ore field could stretch for miles.
Right now, the slaves had dug about five meters deep into the surface layer, where the tungsten content was very low.
"Your Highness, this is black tungsten ore," Qian Dafu said, handing over a stone with a white-blackish hue.
The mineral resembled coal. If not for some translucent crystals on the surface, it could easily have been mistaken for coal.

Xiao Ming nodded with satisfaction. White tungsten ore was more common but usually low-grade. Black tungsten ore was rarer but typically richer, and it usually appeared alongside manganese—a metal he also needed.
Weighing the tungsten stone in his hand, Xiao Ming felt genuine joy. He had specifically asked Qian Dafu to prioritize black tungsten ore for this very reason.
After checking the mining and sorting areas, Xiao Ming was very pleased with the progress. In just a few days, they had already achieved notable results.
Though, it came at a cost—slave laborers were living in the open with only a few tents and no proper houses yet.
"You've been sleeping in tents too?" Xiao Ming asked, moved by the sight.
"No choice, Your Highness," Qian Dafu smiled. "The cement and bricks from Qingzhou won't arrive for a while. At least it's warmer now, and the slaves carried their own bedding. Grouped together, it's not too cold."
"You've all worked hard. Just endure for a little while longer. I'll have the government send rewards soon," Xiao Ming promised with a smile.
Qian Dafu grinned broadly. Then he remembered something and pulled a young man forward.

"Your Highness, this is Qian Gui, my nephew."
"Qian Gui? The one who was enslaved to the government?"
"Exactly. Thanks to Her Highness's kindness, she petitioned His Majesty to pardon him. Now he's returned to me. Your Highness also knows—I have no other relatives left. I treat him as my own son."
Qian Gui bowed deeply, "Greetings to Your Highness."
Xiao Ming knew well that Qian Dafu, who had essentially become a eunuch within the palace system, placed all his hopes on this one remaining family member.
Since Qian Dafu rarely made personal requests, Xiao Ming took it seriously. He glanced over Qian Gui, noting the resemblance to Qian Dafu.
The Empress Dowager's effort to seek a pardon on Qian Gui's behalf seemed to be a reward for Qian Dafu's many years of loyalty.
"You look just as honest as your uncle," Xiao Ming said.

"Your Highness, honesty runs in our Qian family!" Qian Dafu laughed heartily. "I would like to ask Your Highness to let Qian Gui study at Bowen Academy. That way, I can focus on running the mines, and he can learn enough to assist me in the future."
"You have a point," Xiao Ming said, observing Qian Gui again. "Very well. Let him enroll at Bowen Academy for a while."
"Thank you, Your Highness!" Qian Dafu let out a sigh of relief.
Truthfully, even if not for Qian Dafu, Xiao Ming needed to cultivate talents for mineral exploration. Qingzhou's supply of skilled individuals was pitifully small—new blood was urgently needed to support future industrial development.
After inspecting the mine, Xiao Ming returned to Qingzhou, carrying with him three tons of tungsten powder extracted so far.
At the Machinery Department
Bringing the tungsten powder, Xiao Ming headed directly to the machinery department.
"Your Highness, how should the springs be made?" Song Changping asked, sniffing—he was clearly battling a cold.

With flintlock musket production moving forward, Xiao Ming had gathered Qingzhou's strongest research team. The old machinery department talents had been fully reassembled.
However, Xiao Ming hadn't set them all to work on the musket together. He assigned specific tasks.
Zhang Liu and his team would focus on tungsten steel tools and barrel production.
Song Changping was responsible for producing musket bullets and the intricate lock mechanism.
According to Xiao Ming's broader plan, Chen Qi would specialize in artillery research while Song Changping would lead firearms research.
Although barrel production hadn't started yet, small steel ball manufacturing and lock mechanism development could begin immediately. The steps could proceed in parallel—after all, Xiao Ming wasn't starting from scratch. He had access to detailed firearm production data.
"What about extracting pure tungsten from the powder?" Zhang Liu added.
Both questions pointed to technical challenges. Producing springs involved solving the elasticity problem of steel, while refining tungsten at this stage couldn't guarantee high purity—at best, maybe 20% refinement, which was still enough.

"One thing at a time. Zhang Liu, you and your team handle the molds first. Song Changping, you stay—I'll explain the structure of the lock mechanism to you," Xiao Ming ordered.