## I. Dynasty 811

The wind on the grasslands made Dolgor's golden tent flutter.

losing most of their slaves and tribesmen.

Chap	oter	811	
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Inside the golden tent, Geltu's words received the approval of most of the banner chiefs. Continuous defeats had caused them to lose confidence.
They could no longer bear the loss of tribal cavalry. After all, besides the Great Yu Empire, they also faced the threat of the Ottoman Empire in the Western Regions. And in the north of the grasslands, there were also some small tribes coveting the grasslands, known as Tatars. The ancestors of these people came from Persia and had always lived near the North Sea.
Closing his eyes in contemplation for a long time, Dolgor gradually calmed down. Despite his deep dislike for Geltu, he admitted that Geltu's words were correct.

He believed that the Great Yu Empire would take advantage of this great victory to continue conquering the remaining three cities before winter, and with their current military strength, he was completely powerless to stop them.

The cities occupied by the Great Yu Empire could not be recaptured by them. And losing the cities meant

Moreover, for him, a more threatening person than the Great Yu Empire's Emperor had emerged: Geltu.

Lost cities could be recaptured by them, but if the Golden Tent Khanate fractured internally, their glory would become a thing of the past.
Clearly, Geltu was now challenging his authority. If he were to commit the tribe to war with the Great Yu Empire again, Geltu would very likely rebel and seize his position as Khan.
After all, the sons who were qualified to inherit his position as Khan were all dead.
So, for him, the most important thing now was to win over the banner chiefs of these tribes. And to win them over, he had to follow their wishes.
After a long silence, Dolgor said, "You are right. I will no longer send my tribesmen to their deaths. But now the Great Yu Empire is pressing closer step by step. What should we do?"
"Migrate west. Now, we should migrate west," a banner chief said. "Next, the Great Yu Empire will attack Raozhou. Shengdu is too close to Raozhou. Now we must migrate west. The grasslands are our homeland."
Dolgor sighed. In fact, nomadic tribes on the grasslands had never looked down on the tribesmen who farmed in the six cities.
In their view, only those who lived on horseback were noble.
"Order all tribesmen in Raozhou, Jianzhou, and Yingzhou to withdraw from the cities, and burn the cities to the ground. Leave nothing for the Great Yu Empire," Geltu said sternly.

Dolgor nodded. Without the protection of the cavalry, these three cities simply could not withstand the Great Yu Empire's attack.
Continued resistance would only allow the Great Yu Empire to gain more tribesmen and slaves. He knew very well what the Great Yu Empire had done to their tribesmen after occupying the cities.
"Dolan, you are to immediately go to Jianzhou. Baru, you are to immediately go to Yingzhou. Utu, you are to immediately go to Raozhou. Tell the tribesmen to burn the cities, kill any slaves who refuse to leave, and leave nothing for the Great Yu Empire," Dolgor said bitterly.
The three Golden Tent Khanate soldiers responded and left.
The banner chiefs nodded in satisfaction upon hearing this. Although this was a result none of them wished to see, it was clear that they currently had no ability to stop the Great Yu Empire army's attack on the three cities below them.
On the grasslands, they moved with the water and grass. Facing threats, they could migrate at any time. But cities were different; they couldn't take the cities with them.
Geltu had intended to use this matter to unite the banner chiefs against Dolgor, but now Dolgor's decision left him with no excuse. He gently snorted, looking at Dolgor with defiance in his eyes.
In his heart, the current plight of the Golden Tent Khanate was all caused by Dolgor. He was no longer fit to be the Great Khan of the Golden Tent Khanate.

However, the banner chiefs who supported Dolgor were still numerous. Directly confronting him now would bring no benefit. But he would not give up. On the grasslands, their Grey Hawk Tribe was powerful.
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Qingzhou Province.
After three days of continuous drizzle, the weather gradually cleared, and the common people, worried that their grain would rot in the fields, finally breathed a sigh of relief.
The Qingzhou provincial office then issued orders to the production teams in various prefectures and counties, instructing them to quickly harvest to avoid unnecessary losses.
Although the imperial court had now opened up private commerce to the common people, the Great Yu Empire had never relaxed its regulation of various industries. Freedom needed restraint; otherwise, boundless freedom would only lead to disaster and national turmoil.
Xiao Ming saw this very clearly. Therefore, the Great Yu Empire's economy was not a completely free market economy now. Behind the free circulation, Xiao Ming always kept a hand.
Beyond industry and commerce, Xiao Ming naturally did not let agriculture develop wildly. The current situation of the Great Yu Empire was not yet suitable for the common people to do as they pleased. In

fact, during times of national difficulty, the state often implemented planned economies, as the New Deal during World War II fully demonstrated.

During this period, the United States abandoned its previously adopted liberal economic policies and began to systematically intervene in certain areas of the market economy. The centralized economy at this time exerted its powerful advantages.

Precisely because of this consideration, Xiao Ming believed that the most suitable approach for the Great Yu Empire, currently recovering from a multitude of difficulties, was a combination of centralized economy and free market. Only when the Great Yu Empire reached a preliminary level of prosperity like Europe would he gradually let go.

"Your Majesty, I must say this machinery department was established just in time. This spring plowing, we first had this horse-powered drill seeder, which increased the efficiency of cultivation in the plantations by twentyfold. Now we also have a horse-powered harvester, and the saved slaves can completely open up twenty more plantations," Zhan Xingchang said, accompanying Xiao Ming on a walk through the fields.

It was almost June, the season when wheat ripened. Outside Qingzhou City, the golden wheat fields were a delightful sight, and many common people were already harvesting in the fields.

Every year during the harvest season, Xiao Ming would visit the farmlands and plantations around Qingzhou City. Each time he saw these grains, his heart felt a little more at ease.

If judged by contemporary standards, most of the Great Yu Empire's regions were below the poverty line. These regions were very fragile. Once a natural or man-made disaster occurred, production could decrease or even completely fail, which would be a disaster.

Looking at the horse-powered harvester pulled by three horses in the field, Xiao Ming said, "That is why I often say that technology is productivity. What used to require twenty people to do can now be accomplished by just two."
As he spoke, Xiao Ming and Zhan Xingchang descended into the fields.
This was the imperial court's plantation. What was being used in the fields now was an early model of a horse-drawn disc cutter harvester. Compared to the common people who used sickles to cut wheat stalk by stalk.
This horse-drawn disc harvester could cut wheat in swathes. The people behind only needed to bundle the wheat and pull it back to the threshing ground.
For this type of harvester, the time to harvest one mu of wheat was usually the time it took for a horse to walk back and forth, which was about an hour.
But if it were to be harvested by common people, fifty people would be needed to achieve this effect.  Chapter 812
A gentle, warm breeze wafted from the fields.
Golden wheat swayed, and the fragrance of earth and wheat spikes was refreshing. Having stayed in the city for a long time, Xiao Ming only occasionally went out for a walk and discovered that scenery was everywhere.

"Your Majesty is absolutely right. It's just a pity that the number of these harvesters is too small, and they can only be used in plantations for now," Zhan Xingchang picked up a wheat ear and examined it.
Due to the use of chemical fertilizers, the wheat planted by the common people this year was noticeably plumper than before. He couldn't help but show a smile.
Xiao Ming rubbed a few grains of wheat in his hand. He put them in his mouth and bit them. The grains were very hard and had a distinct wheat aroma.
Zhan Xingchang saw this and was somewhat surprised. He said, "I didn't expect Your Majesty to also know how to identify wheat."
"I know more than you think," Xiao Ming chuckled. Before harvesting, wheat often needs to be checked for its moisture content. If the moisture content is too high, it means it's not yet ripe enough.
Zhan Xingchang also smiled. He had never regretted coming to Qingzhou Province from Chang'an seven years ago, because he always believed Xiao Ming was someone worth following. Now everything proved he was right.
Looking at the harvester, Xiao Ming said, "However, the problem you just mentioned will soon no longer be a problem. I have already arranged for the establishment of an agricultural machinery workshop. In the future, horse-powered harvesters and horse-powered drill seeders will be sold. At that time, your prefectural office can encourage production teams to raise funds to purchase these machines. This way, the silver shared by the common people will not be much."

Zhan Xingchang thought for a moment. This was indeed a good idea. This way, the agricultural machinery workshop could make a profit, and the common people could save a lot of effort and cultivate more land.

"Your Majesty is wise. I will return and begin working on this matter," Zhan Xingchang replied with pleasant surprise.

After observing the use of the harvester for a while, Xiao Ming and Zhan Xingchang returned to the field ridges. He said to Zhan Xingchang, "After this grain is harvested, the prefectural office must collect agricultural taxes as soon as possible. We cannot let the soldiers on the front lines go hungry. The grain reserves in the six prefectures were originally enough for this war, but Bashu suffered greatly from the barbarians, so the imperial court still needs to allocate grain for disaster relief."

Zhan Xingchang nodded slightly. He was well aware of this. In fact, after the northern war, the common people in the former feudal lords' territories were very impoverished because they had been exploited too severely by the various feudal lords. Imperial court officials often asked the imperial court for grain instead of providing it.

This situation only slightly improved by the end of this year, but the various prefectures were barely self-sufficient, submitting very little tax revenue to the imperial court.

Overall, this war relied primarily on Qingzhou Province. Besides that, there was Jinling Province. After all, a lean camel was still bigger than a horse. Jinling Province was originally a wealthy area, and with the implementation of reforms, this always commerce-focused region quickly recovered.

According to the information provided by Pang Yukun, industrial and commercial development in Jinling City was now very rapid. After all, compared to Qingzhou Province, Jinling City had more favorable geographical conditions.

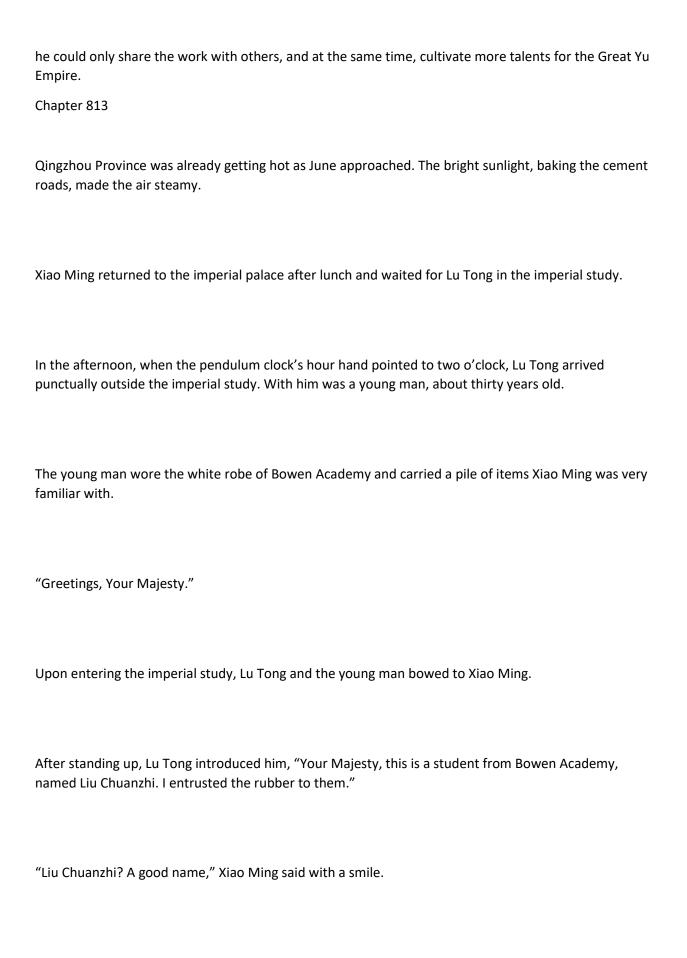
"I have noted it," Zhan Xingchang said with a serious expression. The matter of military provisions could not be taken lightly. As the Governor of Qingzhou Province, overseeing the six prefectures within Qingzhou Province, his responsibility was immense.
Xiao Ming gently nodded. After establishing the "province" as an administrative body, he added the official position of "provincial governor." This official position was equivalent to a high-ranking official in modern times.
His purpose in doing this was to streamline cumbersome government affairs. Without this provincial governor, the Grand Secretariat would have to deal with the affairs of all the Great Yu Empire's large and small prefectures and counties, and the immense amount of government work would be unbearable for them.
With the provincial governor in place, the affairs of each province would be handled by the provincial governor, who would then consult the Grand Secretariat if they could not decide. This made things simple and clear.
After instructing Zhan Xingchang about the grain and fodder, Xiao Ming returned to Qingzhou City under the protection of his guards.
Upon entering the city gate, he saw artisans from the construction department demolishing the walls of civilian neighborhoods.

While the soldiers were fighting on the front lines, Xiao Ming was not idle. Government affairs, teaching,

and technological research—not a single aspect was neglected.

This demolition of neighborhood walls was something he had decided on at the court assembly two days prior.
With the development of industry and commerce in the Great Yu Empire, the old city structure was no longer suitable. Qingzhou City now needed to develop from a feudal city to a modern city.
After all, railways had now extended into Qingzhou City. Now, this city needed more advanced planning, such as residential areas, commercial districts, theaters, and sports venues.
"Your Majesty, it is said that as soon as the Qingzhou City planning map was released, land prices in the city soared. Some common people in the city who sold their houses became rich overnight," Qian Dafu said with a smile.
Xiao Ming smiled wryly. Sometimes, he had to admit that large-scale demolition and construction indeed drove economic growth. But at the same time, he remained vigilant.
He said, "Later, you go and give an oral message to Zhan Xingchang, telling him to suppress land prices. He must absolutely not indulge merchants in investing all their silver into this, otherwise, how can the Great Yu Empire's industry develop?"
"Yes, Your Majesty," Qian Dafu responded. He understood Xiao Ming's intention. This Emperor often spoke of "strengthening the nation through industry." Now that the Great Yu Empire's industry had just begun, profit-seeking merchants were pouring silver into real estate, which naturally reduced the silver invested in industry.

Giving a thumbs up, Qian Dafu said, "Your Majesty is far-sighted. In your old servant's opinion, this is precisely why land prices cannot be allowed to rise. Otherwise, although the prefectural office might temporarily benefit, it would destroy the Great Yu Empire's industry."
"Sometimes, I feel you see things much more long-term than some officials," Xiao Ming praised. Qian Dafu bringing up land prices was certainly not out of whim, but intentionally to remind him.
Qian Dafu chuckled. He said, "This is all learned from Your Majesty. Your old servant feels greatly benefited just by following Your Majesty for an hour."
"You are becoming quite good at flattery." Xiao Ming glanced at the demolished neighborhood walls. However, he also understood that preventing any rise was impossible. What he needed was to control it within a reasonable range.
After all, if the common people didn't sell their properties, merchants couldn't move into commercial areas. From his perspective, sometimes he couldn't be wishful.
Along the central cement road, the carriage headed straight south. The end of the road was his imperial palace.
This morning's itinerary was to inspect agriculture. In the afternoon, there was another very important matter: his long-awaited rubber.
In fact, last year, the Dutch had brought back three ships full of rubber and some rubber tree seeds.  During this period, Lu Tong had assigned the tasks of rubber vulcanization and molding to the chemical academy. A person's energy was limited. Lu Tong, like Lin Wentao, could not specialize in everything, so



"Thank you, Your Majesty, for the compliment," Liu Chuanzhi stammered a little, clearly nervous.

Xiao Ming's eyes held a smile. These people who dedicated themselves to scientific research often didn't interact with outsiders for long periods, so their characteristics were largely similar.

He said, "You needn't be nervous. I am not a man-eating tiger. Are these the rubber products you manufactured?"

Liu Chuanzhi then remembered the rubber in his arms and hastily said, "Yes... yes, Your Majesty. According to the information Your Majesty provided, I, your humble commoner, successfully mastered the method of vulcanizing rubber. With the metal molds provided by the machinery department, I have now manufactured a batch of rubber products."

Xiao Ming nodded. The rubber supplied by the Dutch could only be called raw rubber. This raw rubber was very sticky and easily broken, so it could not be used in industry.

Vulcanized rubber, however, was called cured rubber. This type of rubber had none of the raw rubber's faults and possessed high elasticity, heat resistance, and tensile strength. It also did not dissolve in organic solvents. Contemporary rubber products were basically all vulcanized rubber.

Looking at Liu Chuanzhi's arms, Xiao Ming's smile grew richer. In fact, shaping rubber was not very difficult, because at high temperatures, rubber would become a fluid, similar to molten steel.

Molten steel could be shaped using iron molds, and rubber could naturally also be shaped using iron molds. This was also how Xiao Ming shaped rubber in contemporary times.

The only thing that needed to be done was to vulcanize the rubber before shaping it.
This vulcanization required using a substance as a cross-linking agent, which was sulfur. Different qualities of vulcanized rubber could be produced depending on the time and temperature. There were many vulcanization methods, the simplest of which was to directly heat the two substances together.
"Your Majesty, this is a tire, this is a rubber hose, this is a piston" Liu Chuanzhi took out all the products he brought, listing them off like treasured family possessions.
Xiao Ming took each one from his hand, carefully examining it before putting it down.
For him, rubber was a crucial link in industrial development: shoe soles, hot water bottles, elastic bands used in daily life.
Gloves and blood transfusion tubes used in medicine, various tires used in transportation, conveyor belts used in industry, irrigation hoses used in agriculture, sealing equipment used in scientific experiments, and aircraft, tanks, cannons, etc. used in military affairs, all depended on rubber.
The West was able to surpass the East so greatly in technology largely because they controlled rubber. It was unfortunate that, just like in contemporary times, rubber in this era was still controlled by Europe.
Although he had obtained some rubber tree seeds from the Dutch, going from seed to tree was a long process.

Of course, he had another solution, which was rubber grass, but according to information, the original habitat of rubber grass was in contemporary Yili, Xinjiang, and in this era, rubber grass was clearly still under barbarian control.
Only after he drove out the barbarians could he plant rubber grass in this area. However, conquering and holding this place also seemed to be a difficult task.
So, for him, the most suitable method at present was to purchase rubber from Europeans.
As for occupying South America, he still had a long way to go. Even if he now had a fleet of ironclads, the journey from the Great Yu Empire to South America would still require fixed ports to provide fresh water and coal. Otherwise, his fleet would be paralyzed halfway before even reaching the Americas.
"Excellent, excellent." Faced with one rubber product after another, Xiao Ming could not help but feel excited. With rubber, many machines could be realized.
And he believed that one of the most pressing problems to solve was transportation.
The most profound realization this era gave Xiao Ming was that to get rich, one must first build roads. Only with convenient transportation could the exchange of various resources be rapid.
Lu Tong and Liu Chuanzhi looked at Xiao Ming's excited expression and exchanged smiles, their faces beaming.

Xiao Ming put down the medical blood transfusion tubes and other rubber products. He said, "What reward do you wish for?"
"Your Majesty, this rubber is merely a small effort, relying on the information Your Majesty provided. I, your humble servant, dare not ask for a reward," Lu Tong chuckled.
Xiao Ming ignored him. He said, "If you don't want it, does Liu Chuanzhi not want it either?"
Lu Tong scratched his head and chuckled, while Liu Chuanzhi looked embarrassed, opening his mouth but ultimately saying nothing.
Xiao Ming, seeing this, said, "Liu Chuanzhi, from now on, the Great Yu Empire's rubber will be entrusted to you. You naturally need not be modest now. How about this: to allow you to concentrate on rubber production, I bestow upon you a thousand taels of silver and a fifty mu farm. How does that sound?"
"Thank you, Your Majesty, for your immense grace!" Liu Chuanzhi's body trembled with excitement upon hearing this.
Previously, he was merely a poor scholar. The reason he entered Bowen Academy was that his family had no spare money to support him in going to the capital for the imperial examination. But he never expected this decision to bring him a different turn of fate.
Xiao Ming helped Liu Chuanzhi, who was bowing in gratitude, to his feet. He said, "I am not a stingy person. As long as you work diligently and contribute to the Great Yu Empire, titles, land, and money are

not a problem. N me having no lar	w, my army has captured vast lands outside the pass, so you need not worry about to reward."
Liu Chuanzhi noc	ed deeply.
After asking the	vo some more questions about rubber, Xiao Ming dismissed them.
Once the two ha	left, he immediately sat down and picked up his fountain pen.
could finally have	ntain pen could only be used by dipping it in ink while writing. Now with rubber, he a fountain pen that could absorb ink. After this, he planned to recommend fountain e to all Great Yu Empire officials, saving time on writing with brushes and also saving
shaped early bicy	et of paper, Xiao Ming drew the structure of a bicycle on it. Unlike the bizarrely les in the West, Xiao Ming directly designed a mature "28-bar" bicycle, which was the om the early days of contemporary China.
This type of bicyoweight.	e had a triangular stabilizing lever structure in the middle, which could bear more
practical issues a sturdiness and th	igning this old-fashioned bicycle structure was primarily to consider the bicycle's present. After all, bicycles at this time were used as transportation tools, emphasizing ability to carry people and heavy objects.
Chapter 814	

Jinzhou.
After several days of rest, the Northern Expeditionary Army, following Niu Ben's plan, advanced towards the three cities of Yingzhou, Raozhou, and Jianzhou.
At the same time, news from the secret guards also reached the General Staff Department in Jinzhou.
"The barbarians are evacuating their tribesmen from the cities," Niu Ben said, somewhat surprised. This was news just delivered by the secret guards.
The secret guard who delivered the intelligence said, "No mistake. The news comes from Shengdu. The barbarian Khan has now ordered the massacre of slaves and the burning of cities."
"Beasts!" Niu Ben slammed his fist on the table. The barbarians, after their defeat, were even more brutal and savage.
Stepping out of his tent, Niu Ben called for a team of hunter cavalry and said, "You are to immediately inform Luo Xin, Lei Ming, and Lu Fei to accelerate their march and occupy the three cities as quickly as possible."
"Yes, General." The hunter cavalry turned and left. The main army had not departed long ago, so they could still catch up.

After giving the order, Niu Ben turned to return to his tent. At this moment, a team of cavalry suddenly arrived.
The cavalry stopped in front of Niu Ben, throwing five people, bound on horseback, to the ground. The leading cavalry captain said, "General, we discovered five suspicious Japanese while on patrol."
Niu Ben frowned slightly. He looked at the five people on the ground. These five were dressed as merchants, were not tall, and at first glance, seemed to have little difference from the Great Yu Empire people.
"Did they say anything?" Niu Ben asked.
The cavalry captain said dejectedly, "General, we asked, but we couldn't understand a single word of their gibberish. We should let the imperial court dispatch translators."
"Qingzhou Province is too far. A round trip would take half a month. Go to Liaozhou now and ask Ye Qingyun. He has been in Goryeo and should know a few people who understand their language, after all, Goryeo and Japanese pirates have always colluded."
The cavalry captain responded and turned to go to Liaozhou. Jinzhou was very close to Liaozhou, only a day and a half's ride.
Watching the cavalry depart, Niu Ben ordered, "Strictly guard the five. You must not let them die."
"Yes, General." The guards immediately took the five away.

At the same time, the hunter cavalry who had left the city separately pursued the three main armies.
An hour later, Luo Xin, who was heading towards Raozhou, received Niu Ben's order. He immediately ordered to accelerate their march towards Raozhou City.
However, in his opinion, even if they accelerated, they would probably only find an empty city upon arrival. But the secret guard's message was timely; now, every second counted, and there might still be hope.
Compared to Luo Xin's worries, Lei Ming, who was heading to Yingzhou, was very calm, because Yingzhou was too close to them and too far from the barbarians, so they could easily arrive ahead of time.
And Lu Fei was even more composed than the other two, because Jianzhou was originally the most barren of these six cities. He did not expect Jianzhou City to provide any supplies. The Great Yu Empire only wanted this city to demonstrate its sphere of influence, and at the same time, to serve as a bridgehead for attacking the grasslands and expanding northward.
However, despite this, Niu Ben's order could not be disobeyed. He also issued an order for a forced march.
After his order was given, the soldiers immediately jogged. Forced marches were a mandatory training item for new recruits, in addition to forced marches with heavy loads.

So, facing the order, the soldiers were very calm.
Three days later, the army led by Luo Xin appeared in Raozhou, which should have taken four days to reach.
Qi Guangyi, who had arrived earlier, said, "After the barbarians withdrew from Raozhou City yesterday, barbarian soldiers began burning the city. When our cavalry arrived, a portion of the barbarian cavalry withdrew from Raozhou City without engaging us. Now, there are still some barbarian cavalry and infantry remaining in the city."
Luo Xin said, "Since the barbarians have already migrated west, they will surely not fight to the death with us in Raozhou City. Once the city gate is breached, they will surely flee in panic. At that time, you can send out cavalry to pursue them."
Qi Guangyi nodded.
This time, Niu Ben sent him to Raozhou City with a purpose. Now that the barbarian cities were basically taken, all that remained were the barbarian tribes on the grasslands. To drive out these barbarian tribes later, they would still need these cavalrymen.
After all, cavalry had too much mobility on the grasslands; ordinary infantry simply couldn't keep up.
The two settled on a battle plan. At this point, Luo Xin had the artillery set up their positions and began bombarding Raozhou City's gate.

Under the power of the new shells, Raozhou City's gate was vulnerable. Two shells shattered the entire wooden gate.
"Sound the charge bugle!" Luo Xin was full of confidence. The victory in Jinzhou City made him realize a truth: the barbarians were merely paper tigers. In the face of absolute military might, the barbarians could only retreat.
As his words fell, the sound of the charge bugle rang out. The soldiers, their morale high from successive victories, charged towards Raozhou City, roaring.
"Soldiers, once we take Raozhou City, we can sleep soundly!" Luo Xin shouted.
His words energized the soldiers, who had been on a forced march for three days. They mustered their last bit of strength and charged into the city.
At this time, the barbarian soldiers inside the city were like startled birds. Soldiers who had fled from Jinzhou City described the Great Yu Empire's firearms as terrifying, and frightening legends about "ground fire" had also spread.
"Run! The Great Yu Empire is attacking!"
Some barbarian soldiers, seeing the Great Yu Empire soldiers with firearms, turned and ran. Now, all the tribesmen in the city had withdrawn. The remaining orders were for massacre and burning the city.

But compared to their own lives, they were clearly unwilling to risk massacring those slaves who were as cheap as grass in their eyes.
"Bang, bang, bang"
The Great Yu Empire army, upon entering the city, practically chased the barbarian soldiers, firing at close range before fixing bayonets and charging.
At this time, in Raozhou City, the Great Yu Empire held the upper hand in both the number of soldiers and combat effectiveness. Facing the fierce offensive, barbarian soldiers continuously retreated from the East Gate towards the West Gate.
Two hours later, the Great Yu Empire army completely occupied Raozhou City. However, due to the barbarians' destruction, the city was filled with flames, and the soldiers once again engaged in firefighting efforts.
Outside the city, Qi Guangyi had long been waiting for the barbarian soldiers fleeing from the city. He roughly estimated that just over ten thousand barbarian soldiers had escaped from the city.
And most of them were infantry.
Glancing at the rolling smoke inside the city, Qi Guangyi's eyes turned cold. Cruelty must be met with cruelty when dealing with the brutal barbarians.

"Kill! Leave no one alive!" Qi Guangyi spurred his warhorse. He charged ahead, alone, into the chaotic mass of barbarian soldiers.
In an instant, his high-speed charging warhorse directly knocked barbarian soldiers flying. At the same time, Qi Guangyi slashed left and right, and barbarian soldiers continuously let out dying wails.
Behind him, thirty thousand cavalry, like a rolling torrent, swept over the escape route of the barbarian soldiers, leaving no one behind wherever they went.
Chapter 815
Imperial Study.
After hanging a map of the Great Yu Empire on the eastern wall, Xiao Ming hung a world map on the western wall.
These two maps were brand new and were drawn by the most excellent cartographers in Qingzhou City.
Compared to his own rough sketches, the quality of these two was extremely high. One could say they were almost indistinguishable from precise contemporary maps.
On the maps, mineral deposits, mountains, and rivers were all clearly marked. On the world map, Xiao Ming also marked the colonial territories he currently understood.

Overall, current Southeast Asia was almost entirely occupied by Western powers. Among them, the Netherlands occupied Luzon, which was contemporary Philippines. However, due to the decline of its national power, the Dutch only held a very small part of Luzon; most of the area was still occupied by Spain. Overall, Spain was the ruler of Luzon.

Southwest of Luzon, which was Indonesia, was the Netherlands' largest colony in Southeast Asia. The Dutch had occupied Jakarta two centuries ago.

Malaysia, west of Indonesia, was once also a Dutch colony, but after losing the naval war, it was ceded to Britain.

In addition, Britain also possessed two colonies, India and Burma, while France held the so-called Indochina, which were contemporary Vietnam, Laos, and Cambodia. The Great Yu Empire currently referred to them as Annam, Vientiane, and Zhenla respectively.

Looking at the map, Xiao Ming then looked at Australia. According to information provided by the Dutch, this place also belonged to Britain, and similar to history, it was also a place for exiling convicts.

His gaze shifted from the southeastern corner of the Great Yu Empire to the north. Xiao Ming looked at the three cities still in barbarian hands.

For him, after losing Jinzhou, the barbarians were severely weakened and could no longer wage large-scale wars with him.

The reason was simple: the barbarians had lost their grain supply areas. Dispatching cavalry to attack already occupied cities at this time would be a foolish act.

Currently, the barbarians' smartest move would be to return to the grasslands and, after recuperating, resume their past life of raiding and plundering. However, he clearly would not give the barbarians this opportunity.
To strike a snake and not kill it is to suffer its revenge. He would not give the barbarians any more breathing room. He had now issued a ban: no merchant was allowed to sell any goods to the barbarians.
He would rather lose some silver than allow the barbarians to live on the grasslands. At the same time, Qi Guangyi would be stationed in Raozhou, leading his cavalry to continuously compress the barbarians' living area.
Scanning Raozhou City, Xiao Ming looked at Yingzhou. His eyes slightly narrowed.
Compared to Raozhou, Xiao Ming attached more importance to Yingzhou this time, because this place had always been a source of national pain in later generations. Perhaps many people didn't know where Yingzhou was, but they would certainly understand what the Tumen River estuary meant.
It could be said that in the northeastern region of Guandong, this location was the only outlet to the sea. From Yingzhou, following the Tumen River for fifteen li would lead to the future Sea of Japan.
As long as a naval port was established here, he could strike the Japanese mainland with his navy at any time.
In contemporary times, the Qing Dynasty, having signed the "Sino-Russian Aigun Treaty" in 1858 and the "Treaty of Peking" in 1860, ceded the adjacent territory between the northeast and the Sea of Japan to Tsarist Russia. It was never reclaimed even after the founding of the People's Republic.

After World War II, to prevent his country from utilizing the outlet to the sea, Russia even colluded with North Korea to build a so-called "Russo-Korean Friendship Bridge" over the Tumen River.
This bridge spanned the Tumen River, with extremely low bridge piers. It could be said that no large cargo ship could pass through, thereby completely cutting off his country's access to the sea via the Tumen River.
Thinking of this, Xiao Ming picked up his pen and drew a circle around Yingzhou.
After the Northern Expeditionary Army occupied it, he would meticulously manage this city. Currently, the east side of Yingzhou was Goryeo territory. After this war ended, he would forcibly occupy the land between Yingzhou and the sea and establish the Great Yu Empire's second navy there.
His gaze continued northward. Xiao Ming saw Jianzhou. The Great Yu Empire's Jianzhou was equivalent to contemporary Harbin. North of Jianzhou was the future Heilongjiang region, and further north was the Siberian snowfield.
Information provided by the Dutch stated that the Moscow Principality in Europe had formed the monarchical Tsarist Russian Empire forty-seven years ago. After the first Tsarist Russian Emperor, Alexander the Great, the current ruler of Tsarist Russia was an Empress named Ekaterina.
It was said that this Tsarist Russian Empress and the British Queen were of similar age, taking over their countries at eighteen and twenty years old respectively, and had now ruled for four or five years.

Although both these monarchs were women, Xiao Ming had no intention of underestimating them, because modern history proved that European empresses were very formidable. Often, when empresses were in power, it was also the time of the greatest national expansion.
Queen Elizabeth and Queen Victoria of Britain, needless to say. During the reign of Empress Catherine the Great of Tsarist Russia, it was precisely the period of conquering Siberia and Alaska.
Although the Empress Ekaterina of this era differed by only one character from Empress Catherine the Great, her abilities seemed no weaker than those of contemporary Catherine the Great.
Now, she had extended Tsarist Russia's reach to Siberia and Alaska. However, it was fortunate that Tsarist Russia was currently still focusing on Europe.
This conquest of Siberia and Alaska was merely a spontaneous act by the common people. This was similar to how Britain expanded its sphere of influence at sea using armed merchant ships. Tsarist Russia, meanwhile, pursued expansion on land using civilian forces.
"We cannot give Russia a chance to grow," Xiao Ming said, holding his arms and musing.

Whether in this era or in contemporary times, this country was extremely dangerous and volatile. Once it grew strong, it would be a nightmare for the Great Yu Empire. Therefore, he could not allow Tsarist

Russia to freely seize land around him.

However, although he thought this, Xiao Ming knew that he currently lacked the ability to extend his sphere of influence to Siberia. Guandong was still a mess. He had no way to provide grain and fodder for the army from Qingzhou Province to Siberia; this route was too long.
Before advancing into Siberia, he had to at least stabilize Guandong.
Thinking of this, Xiao Ming's gaze shifted to Central Asia, then to Europe, Africa, and the Americas. On this vast world map, the area he currently controlled was but a small fraction, while Europe had already extended its sphere of influence across the entire world.
"We must speed up."
Xiao Ming turned around. How could he be absent from this most glorious Age of Discovery? Now, steam warships were already under construction, and shipyards were also undergoing industrial modernization.
His ultimate goal was to build ironclads. This way, his navy would dominate the seas with a generational advantage. Then, no matter how experienced British warships were, his fleet could bury them all in the sea.
Chapter 816
Lei Ming was observing Yingzhou through his telescope.
Upon arriving at Yingzhou City, he did not immediately order an attack. Instead, he had his soldiers encamp around Yingzhou City, planning to attack the city after a night's rest.

Yesterday, the hunter cavalry who arrived early at Yingzhou City killed a team of barbarian cavalry heading to Yingzhou. This group of cavalry had been sent by the Great Khan Dolgor to deliver orders to Yingzhou.
Knowing this, he naturally saw no need to rush the attack. Instead, he allowed his weary soldiers to rest before making further plans.
Compared to the six cities in Guandong controlled by the barbarians, Yingzhou City was the smallest. It could only house over thirty thousand people, and all four of its city walls were earthen, not stone.
Such a city was too weak for Lei Ming; it could be captured in just half a day.
However, Niu Ben's instruction to attack Yingzhou this time was clearly not just for Yingzhou. His mission also included cooperating with Ye Qingyun to put high pressure on Goryeo.
Because the Great Yu Empire was about to take action against Goryeo.
After a night's rest, the next day, Lei Ming launched the attack as planned. Under the Great Yu Empire's artillery fire, Yingzhou City's walls were simply vulnerable.
Amidst flying dust, the earthen walls collapsed in swathes. After only a short bombardment, huge breaches appeared in all four city walls of Yingzhou City.
At this time, the five thousand barbarian soldiers inside Yingzhou City were desperate. Facing the Great Yu Empire's superior firearms and tens of thousands of troops, they had no chance of victory. However,

they still chose not to surrender.

"Sound the charge bugle."
Lei Ming lost patience. They would no longer show any forbearance towards the barbarians. At this point, tens of thousands of musketeers charged towards Yingzhou City, roaring.
For the soldiers, this was entirely a battle for easy merit. They could effortlessly capture the city without arduous combat.
An hour later, the Great Yu Empire's dragon flag rose inside the city. Looking at the flying flag, a smile appeared on Lei Ming's lips. The days of the Great Yu Empire being bullied were gone forever.
Meanwhile, the main army led by Lu Fei was on its way to Jianzhou. Compared to Raozhou and Yingzhou, Jianzhou was a bit further away.
However, this did not dampen the soldiers' high spirits. Two days later, on June 7th, the main army arrived in Jianzhou.
Although summer had already begun, the early morning climate in Jianzhou was still very cool. Facing this northernmost city of the Great Yu Empire, a hint of nostalgia flickered in Lu Fei's eyes.
In the history of the Great Yu Empire, the furthest extent of its influence had reached Jianzhou. And now, he was leading the Great Yu Empire's army back.

"Army Commander, we arrived a step too late. This Jianzhou is already an empty city."
Before reaching Jianzhou City, Lu Fei saw the Jianzhou city gate wide open. Puzzled, he dispatched soldiers to scout the city.
"Damn it! I wanted to fight a fierce battle," Lu Fei said, somewhat dejectedly.
Compared to Yingzhou, Jianzhou was only slightly larger. And due to its remote location, it was sparsely populated, with few barbarians living in Jianzhou City.
On the way here, he had already thought about how to quickly capture this city, but now his plans were all for naught.
"Enter the city."
Lu Fei merely snorted and gave the order. Even if the barbarians fled, they still had many things to do. This Jianzhou City was the Great Yu Empire's northern bridgehead. After the war ended, Guandong common people would be migrated here.
Moreover, he also had to leave a portion of soldiers stationed in Jianzhou City to guard against barbarian harassment.

Just as the soldier said, there wasn't a single soul in Jianzhou City now. Occasionally, one could see slaves who had died tragically on the streets. The entire city was like a ghost town.
Having the soldiers locate the Jinzhou City military camp, Lu Fei immediately ordered hunter cavalry to relay the news of occupying Jianzhou City back to Jinzhou.
Four days later, Lu Fei's news reached Niu Ben. Niu Ben had been waiting for this intelligence for three days.
Because three days prior, Luo Xin and Lei Ming had already sent back their battle reports.
"This war is basically over for now."
In the General Staff Department, Luo Quan's gaze swept across the six cities in Guandong. They had now completely occupied the Guandong region, and the barbarians had been driven back to the grasslands, their strength greatly diminished.
Niu Ben put down Lu Fei's battle report and smiled, "The Great Yu Empire has finally recovered its largest territory from the past. His Majesty is truly a reincarnation of Emperor Wu of Han."
Luo Quan nodded lightly. A Great Yu Empire that was almost annihilated had been brought back to life in Xiao Ming's hands. Now, he had even driven the Golden Tent Khanate in the north back to the grasslands. Such monumental achievements had not even been reached by Great Ancestor Xiao Yuanzhi.

"You're right. Our Emperor can truly be called a monarch of restoration. But from His Majesty's intention, the Great Yu Empire will continue to expand its territory," Luo Quan said excitedly.
Niu Ben also felt some anticipation. "No one can know how great an empire His Majesty can build for the Great Yu Empire."
After a pause, he said, "Oh, by the way, this news must be sent to Qingzhou Province as soon as possible. Although the barbarians have migrated west, some petty trouble-makers still need to be dealt with."
"Are you referring to Japan?" Luo Xin asked.
Niu Ben nodded. "Ye Qingyun transferred a translator from Haigucheng. After severe interrogation, those five Japanese men confessed everything. They were envoys sent by Japan to Jinzhou to ally with the barbarians, to jointly attack our northern expeditionary army from both east and west. Unfortunately, they arrived a bit late; the barbarians were already defeated when they got here."
"Hmph, a tiny island nation dares to covet the territory of my Great Yu Empire. They are simply seeking death!" Luo Quan snorted angrily.
Now, although he and Niu Ben were not arrogant, they were very confident. The Great Yu Empire army was no longer the weak, sick, and old force it once was.

For the two of them, they feared no army in battle.
At this point, Niu Ben no longer wasted words. He sent someone to deliver the battle report to Qingzhou Province, then he and Luo Quan began studying the map.
Currently, there were two armies located on the Goryeo border: Ye Qingyun's army in Liaozhou and Lei Ming's army in Yingzhou.
These two armies combined had over seventy thousand musketeers and over forty thousand cavalry. They could launch an attack on Goryeo at any time.
•••
Ryukyo City.
The Golden Tent Khanate's loss of Jinzhou, followed by the loss of Yingzhou and Raozhou, had reached here through merchants.
For a time, the Goryeo court was shaken, and civil and military officials were all in a state of panic.
In the royal palace at this moment, the King of Goryeo held a precious sword, his body stained with blood. Lying on the ground was the Queen, who had once had a private affair with Beishan.

"Don't you love that dog-villain Beishan? Go meet him in the underworld then! Bitch! Bitch!" The King of Goryeo's face was twisted in fury. With every shout, the King of Goryeo plunged his sharp sword into the Queen's body.
The thick smell of blood in the entire bedchamber made the palace maids and eunuchs dare not even breathe.
As the King of Goryeo was in a state of madness, a group of officials appeared at the bedchamber door. State Councilor Hwang Ja-man said loudly, "Your Majesty, all the ministers have arrived."  Chapter 817
"Clang!"
The King of Goryeo's precious sword fell to the ground, making a sound of metal striking the earth.
Wiping the blood from his face, the King of Goryeo said expressionlessly to the eunuchs, "Clean up the bedchamber."
With that, he and Hwang Ja-man walked towards the council hall in front.
News of the barbarians' westward migration arrived, and the suppressed anger in the King of Goryeo's heart finally erupted. The various humiliations Beishan had inflicted upon him flashed through his mind, driving him mad.

Now that Beishan was dead, how could he tolerate the Queen who had once colluded with Beishan in front of him?
In the council hall, hundreds of ministers were already waiting. The arrival of Hwang Ja-man and the King of Goryeo made them concentrate.
"Your Majesty, the news of the Golden Tent Khanate's westward migration is indeed true. Now that the Great Yu Empire is powerful, I hope Your Majesty will decide how Goryeo should position itself."
The speaker was the Left State Councilor, Kim Hyun-sung. Together with Hwang Ja-man, the two were the two highest-ranking officials in Goryeo's officialdom.
This question also troubled the King of Goryeo. After venting his anger, he had to face another cruel reality: what should Goryeo do now that it had lost the Golden Tent Khanate's protection?
Japan to the south watched covetously, and the current Great Yu Empire was a behemoth that could beat the Golden Tent Khanate until it couldn't find its way north.
And Goryeo was tightly sandwiched between these two countries. At the same time, he understood in his heart that neither the Great Yu Empire nor Japan would allow Goryeo to live in peace.
The Golden Tent Khanate had lost; what followed would be Goryeo's nightmare.

Before the King of Goryeo could speak, Hwang Ja-man suddenly spoke out, "Your Majesty, we now have no choice but to pledge allegiance to the Great Yu Empire. I am willing to lead an envoy to Qingzhou Province to present a state letter and tribute, honoring the Great Yu Empire as our suzerain."
As Hwang Ja-man's words fell, a deathly silence descended upon the council hall. The hundreds of civil and military officials, who had once been close to the Golden Tent Khanate, now remained silent.
They understood the Golden Tent Khanate's formidable strength. The Great Yu Empire's ability to easily defeat them meant that dealing with Goryeo would be even simpler.
The loss of Haigucheng and Bisa Castle further made them realize the Great Yu Empire army's strength. It could be said that Goryeo was now in danger of annihilation at any moment.
"Your Majesty, the Right State Councilor is absolutely right. We should now pledge allegiance to the Great Yu Empire. This way, we can use the Great Yu Empire to drive away the Japanese pirates and reclaim our southern territories. Is not the so-called suzerain meant for us to exploit? As long as we achieve our goal, what does it matter if we temporarily humble ourselves?"
A minister knelt on the ground and shouted.
"Your Majesty, this is the way small nations survive. Utilizing powerful nations for survival has always been our guiding principle. I hope Your Majesty will think twice."

The King of Goryeo silently watched his ministers. Although he felt extremely aggrieved, this was now

the reality. The wisest choice now was to dispatch a delegation to the Great Yu Empire.

"All you beloved ministers are right. If the Great Yu Empire desires the empty title of suzerain, let them have it. Haven't we been using every suzerain for hundreds of years? As long as we show a little humility, the Great Yu Empire will drive away Japan for us. I am willing to endure this humiliation," the King of Goryeo said decisively.
Although he spoke passionately, as if for the country and its people, what he truly wanted to preserve was his own throne and wealth.
"Your Majesty is wise."
The ministers shouted in unison. Even the ministers who had once been friendly with the Golden Tent Khanate rejoiced. They had befriended the Golden Tent Khanate for survival, and now befriending the Great Yu Empire was also for survival.
Hwang Ja-man let out a slight breath. He said, "In that case, I will prepare in a few days and then depart for Qingzhou Province."
The King of Goryeo nodded. He said, "Take the imperial prince with you as well. Let him remain in Qingzhou Province as a hostage, to appease the Emperor of the Great Yu Empire."
"Yes, Your Majesty," Hwang Ja-man said happily.
Having settled this matter, the King of Goryeo waved his hand, dismissing the ministers.

At this point, Hwang Ja-man left the council hall before the other ministers and headed to his residence. Upon returning home, Hwang Ja-man hastily went back to his room and eagerly shouted, "Quick, bring the black incense!"
The servants, hearing this, soon brought a bamboo pipe for smoking black incense, along with some powder.
Hwang Ja-man's face showed a morbid excitement. He picked up the opium pipe and began puffing smoke towards the candle flame, looking utterly engrossed.
While he was smoking the black incense, Hwang Byung-ahn appeared outside the door. He said to his father, who was enjoying himself, "Father, why didn't you wait for me?"
With that, he also lay down on the bed and smoked with Hwang Ja-man.
Hwang Ja-man glanced at Hwang Byung-ahn. He said, "You just returned from Haigucheng? How much did you lose this time?"
"Not much, just a thousand taels of silver. For our family's business, that silver is nothing," Hwang Byung-ahn said calmly.
"Hmph, this is all thanks to Chairman Li's care. From now on, when you go to Haigucheng, don't just focus on gambling. You must also cultivate a good relationship with Chairman Li. Now that the

barbarians have been thoroughly defeated by the Great Yu Empire, Goryeo will soon switch allegiance to the Great Yu Empire." Hwang Ja-man said, "Today, I told His Majesty that I intend to go on an envoy mission to Qingzhou Province. You go and inform Chairman Li, tell him that I will lead a delegation to Haigucheng in three days, and then discuss this mission with him."
Hwang Byung-ahn raised his eyebrows. "Father, you always said I was useless, but what about now? If not for my acquaintance with Chairman Li, our Hwang family would not have had this opportunity. When you return from this trip to Qingzhou Province, Father, you will be the foremost power in Goryeo."
Hwang Ja-man smiled. "Hahaha, this is the only proper thing you've ever done. This time, after I return from the Great Yu Empire, I want to see how Kim Hyun-sung will contend with me."
"Hehehe" Hwang Byung-ahn also laughed triumphantly. He said, "Father, what does His Majesty think of this black incense?"
"That goes without saying! Naturally, it's like a dream. Otherwise, His Majesty wouldn't have agreed to this wonderful thing," a sharp glint flashed in Hwang Ja-man's eyes.

Goryeo Royal Palace. The blood here had already been cleaned. Returning to the bedchamber, the King of Goryeo yawned, then ordered for black incense to be brought to him.

This item was sent by Hwang Ja-man. After two uses, he became addicted. It truly was a substance that could relieve a thousand worries with one puff.

While puffing smoke, the King of Goryeo recalled Goryeo's history. He believed he had done nothing wrong this time, because historically, they had always chosen to align themselves with strong Central Plains dynasties.

When they were weak, they would seize the opportunity to encroach on land. It was this strategy that allowed Goryeo's territory to continuously expand, from the south all the way to the Yalu River and Tumen River.

Subsequently, Goryeo's former kings had massively migrated common people from the south to settle in the north, and at the same time established twenty-six cities and sixteen fortresses, eventually completely occupying this vast land.

When the Great Yu Empire was weak, he also wanted to emulate the former kings by occupying the Changbai Mountain area. It was just that the Golden Tent Khanate was too domineering, preventing him from succeeding. And this had always been a regret for him.

Chapter 818

Xiao Ming closed the memorial sent by Niu Ben, a deep smile on his face.

Qian Dafu, standing by, also smiled. "Your Majesty is so pleased. It must be that the remaining three cities have all been conquered."

"You guessed correctly. All of Guandong is now under the control of the Great Yu Empire. Now, the Great Yu Empire has gained the land of three additional prefectures, which is truly gratifying," Xiao Ming said.

The Northeast three provinces were famously known as a grain-producing region in contemporary times. Their fertile black soil yielded high grain production.
It was a pity that the Central Plains dynasties rarely focused their attention here, leaving it continuously occupied by foreign tribes throughout various dynasties.
Now that he had reclaimed the entire Guandong region, his next step would be to establish an industrial zone centered on Anshan, and at the same time, develop it into a grain production base. The contemporary Liaoning region, where Bisa Castle was located, would also have a large shipyard.
"Such a monumental achievement will surely engrave Your Majesty's name in history and be praised for ten thousand generations. Your old servant will also bask in your glory," Qian Dafu smiled even more happily.
Xiao Ming shook his head helplessly, "I don't care how historians evaluate me. I only hope that the Great Yu Empire will no longer suffer bullying from foreign tribes and stand at the pinnacle of the world."
With that, Xiao Ming remembered something and picked up his pen.
Now that Guandong was stable, there was no need for so many troops to be stationed there. He would recall most of the musketeers.

The barbarians had migrated west. They were now like dogs without a home, utterly incapable of harassing the Great Yu Empire again. Now, he could finally free up his hands to completely unify the

Great Yu Empire.

After all, the Prince of Yong, the Prince of Huainan, the Prince of Chu, and the Prince of Ruyang were still there. Strictly speaking, the Great Yu Empire was still in a state of division.
Only by pacifying the domestic situation could he concentrate on using firearms, which were even more advanced than those of the Europeans, to end the Western colonial era.
After writing the imperial edict to recall the troops, Xiao Ming had Qian Dafu dispatch a eunuch to Jinzhou.
Once the main army returned to the capital and rested for a period, he would have time to deal with the remaining feudal lords.
Having settled this matter, Xiao Ming did not remain idle. Instead, he went to Bowen Academy under the protection of his guards. Now, daily lectures at the Son of Heaven's Academy had almost become a major event, equivalent to court assemblies.
And to gain entry to the Son of Heaven's Academy and the special honor of being a disciple of the Son of Heaven, the learning atmosphere at Bowen Academy was intense. One could hardly find any students loitering there.
Every student he saw was carrying books and hurrying along, because not only the Son of Heaven's Academy, but the selection system practiced by Bowen Academy also put great pressure on the students.

If one did not study diligently and failed exams, after two failed retakes, one would be advised to withdraw, thereby losing the qualification as a student of Bowen Academy.
For many impoverished students, such a thing was intolerable, because everything at Bowen Academy was free, and they couldn't possibly find a better place.
Following his usual custom, Xiao Ming first went to the Son of Heaven's Academy to answer difficult questions.
Next, he proceeded to the laboratories where key experiments were currently being conducted.
Unlike before, he now directly participated in various experiments as a technical consultant, and he had formulated a sequence of scientific and technological developments, gradually realizing the technologies from the technology crystal.
"Your Majesty, this is the latest improved triple-expansion steam engine. Overall, it has completely surpassed the previous single-cylinder reciprocating engine."
Xiao Ming was now in Lin Wentao's laboratory. After repeated experimental improvements, Lin Wentao had finally manufactured the triple-expansion steam engine.
In fact, the principle of this steam engine was similar to that of a simple reciprocating engine, except that this steam engine had three cylinders.

These three cylinders were respectively high, medium, and low pressure cylinders. The steam engine underwent three stages of expansion in the three cylinders, thereby improving the thermal efficiency of the steam engine.
Therefore, the truly advanced aspect of the triple-expansion steam engine lay in the three-stage utilization of steam. This meant that after steam performed work in the first cylinder, it would then enter the second cylinder to perform work, followed by the third. This way, the same amount of steam could allow the steam engine to perform more work.
This would allow a steamship to travel further at sea using the same amount of coal and water.
To put it simply, this was equivalent to the fuel consumption problem of modern automobiles. The utilization rate of fuel would determine how far a vehicle could travel under equivalent conditions.
And in the era he was in, maritime resupply was already a very difficult matter. Being able to reduce fuel supply points would be a huge saving.
Being able to manufacture single-cylinder reciprocating steam engines, the components for this three-cylinder steam engine were naturally not a problem, as the materials used were the same.

The reason it took so long to successfully develop this steam engine was primarily due to testing the strength of the materials required for this steam engine, as well as the use of safety valves on the steam engine.

The only concern was the problem of explosions caused by excessive pressure in high-temperature,

high-pressure steam engines. There were many such instances in history.

However, the Great Yu Empire already had pressure gauges. With the appropriate release of steam
pressure using safety valves, the high-temperature, high-pressure steam engine was now much more
stable.

Precisely because of this, Lin Wentao announced the successful development of the triple-expansion steam engine.

"After all this time, the effort wasn't wasted. But you can't be idle now. You must immediately produce this steam engine and deliver it to the shipyard. Zhang Liang is waiting for your steam engine to refit his warships," Xiao Ming said, looking at the steam engine in the laboratory with satisfaction.

This was almost identical to the triple-expansion steam engine in the technology crystal. With basic industrial capabilities, many machinery manufacturing processes became easier. As long as qualified parts were available, some machines could be successfully manufactured. The only thing that needed to be strengthened was the strength and precision of the parts.

Lin Wentao breathed a sigh of relief upon hearing this. This triple-expansion steam engine was finally qualified. Ever since Xiao Ming started overseeing the laboratory, everyone had been on edge, all to achieve their goal as soon as possible.

Although the pressure was greater than before, Lin Wentao was still very happy. The honor of researching steam engines with the Emperor was not something everyone could obtain.

Now, whenever they met with officials, they no longer spoke with any condescension. On the contrary, they were extremely envious.

"Yes, Your Majesty, I will return and arrange for artisans to manufacture the triple-expansion steam engine. However, what is the next task for the laboratory?" Lin Wentao asked with some anticipation. Those who specialized in technology could not sit still.
Xiao Ming hesitated. In fact, for him, the triple-expansion steam engine was just the beginning. This steam engine was merely the simplest multi-expansion steam engine.
In the field of steam engines, Lin Wentao still had a long way to go. Furthermore, the next step beyond multi-expansion steam engines was steam turbines, but Xiao Ming had no expectation of realizing this in the next five or six years.
Because this was completely technology from the World War I era. However, even if it couldn't be realized, advance technological reserves were still necessary.
So he said, "Continue the research and improvement of the multi-expansion steam engine. If you still have energy, you can consider steam turbines. For both ships and electricity, these are revolutionary power machines."
Lin Wentao had also encountered the concept of steam turbines in books, but this type of machine was clearly much more complex than a steam engine. Currently, Qingzhou Province's industrial capacity could not produce it.
However, thinking of Su Liangcai's good progress in electricity research, a faint sense of anticipation

stirred in his heart.

Chapter 819

The Prince of Chu's fingers trembled slightly as he held the intelligence report sent back from Qingzhou Province by his spy.
The Great Yu Empire army's occupation of Guandong was cause for celebration in Qingzhou Province, but for him, it was nothing short of a nightmare.
In the early stages of the Northern Expedition, he had maintained a detached attitude, hoping that Xiao Ming and the barbarians would fight to mutual destruction. This would give him more time to recuperate.
But after Pingzhou fell, he was extremely disappointed. Clearly, he had severely underestimated Xiao Ming's strength. At this point, he had considered seizing the opportunity to attack Qingzhou Province from the north.
However, Xiao Ming was clearly prepared for him. Fifteen Great Yu Empire warships were docked at Jinling Province harbor, and Jinling City was also heavily guarded.
Although his army had improved somewhat under French training, it was far from enough for him. After the northern expedition began, he had once dispatched suicide squads disguised as Japanese pirates to attack Great Yu Empire soldiers in Tongzhou.
What angered him was that three hundred suicide squads armed with firearms were actually defeated by fifty musketeers guarding the Tongzhou pier.

According to the returning suicide squads, the Great Yu Empire soldiers' firearms had a longer range and
greater power than theirs. More importantly, Xiao Ming's soldiers had extremely strict discipline, and
their formation remained completely undisturbed when attacked by them.

"The Golden Tent Khanate is finished. Who will be next?" The Prince of Chu's eyes held a hint of despair. He knew that he was absolutely no match for Xiao Ming now.

Moreover, it was rumored that two bizarre weapons had appeared during the conflict with the barbarians.

Cao Kun accompanied the Prince of Chu. Unlike his previously humble status, the Cao family now held a significant position in the State of Chu.

To resist Xiao Ming, the Prince of Chu launched extensive reforms in the State of Chu. On one hand, he emulated Xiao Ming, and on the other, he followed the French's advice and prepared to emulate Europe.

Regardless, their Cao family now profited handsomely. And compared to Xiao Ming, who strictly prohibited merchants from participating in politics, the Prince of Chu was now more tolerant towards merchants.

Many major merchants involved in maritime trade had now joined the Prince of Chu's advisory staff.

"Your Highness need not worry too much. Although Xiao Ming defeated the barbarians, he himself suffered some losses. Many people died just in the Battle of Pingzhou. Now that he is returning to the capital, he will surely need to recuperate," Cao Kun said thoughtfully.

"So what? Even after recuperating, he'll still attack. The intention to reduce feudal lords' power surfaced a while ago. Although he rejected the memorial, in my opinion, it's just a delaying tactic," the Prince of Chu sighed.
Cao Kun used to despise the Prince of Chu because the Prince of Chu tried to destroy the Cao family and seize its wealth. But now it was different. Compared to Xiao Ming, he preferred the Prince of Chu, because here he saw the Cao family's future.
If the State of Chu continued to develop, he firmly believed that the Cao family would possess extremely high power in the State of Chu. Once they controlled power, the Cao family could use that power to earn even more money.
Like him, many merchants harboring similar hopes had come to the Prince of Chu. They were all deeply influenced by Western merchants.
"Your Highness, I, your humble servant, do have a plan," Cao Kun suddenly said.
The Prince of Chu was startled, showing an eager expression. "Quick, tell me."
"At this perilous juncture, for Your Highness's sake, I, your humble servant Cao, can only risk taking action. Does Your Highness remember the Cao Family Bank in Qingzhou Province?" Cao Kun narrowed his eyes.
"Of course I remember." The Prince of Chu snorted lightly. The Cao family was certainly hedging its bets; the Cao Family Bank was precisely a gift of submission to Xiao Ming.

Cao Kun looked embarrassed. "Actually, it's not just Qingzhou Province. The Cao Family Bank has now spread throughout various northern prefectures. And because of the Cao family's reputation, many merchants have deposited their silver into my bank. Now, with just one order from me, the Cao Family Bank can immediately abscond with the silver to the State of Chu. Without silver, merchants, common people, and powerful families in various prefectures will surely fall into chaos. That would be enough to keep Xiao Ming busy."

The Prince of Chu looked excited. "Excellent, excellent! But if that happens, won't the Cao family become a thorn in Xiao Ming's side? And your Cao family's business?"

"Your Highness need not worry. Before that, I will have Zhengyang liquidate the Cao family's businesses. Then we will say that the Cao family suffered huge losses overseas, and our expenses exceeded our income. Now the Cao family is too poor to redeem silver. Perhaps then, Xiao Ming will not only not punish the Cao family, but will also try to save the Cao family. Otherwise, this will be a huge blow to the Great Yu Empire's industry and commerce." Cao Kun looked confident.

After a pause, Cao Kun continued, "Of course, this is just one aspect. Although the barbarians have just suffered a defeat, a lean camel is still bigger than a horse. Your Highness might as well dispatch merchants to the Golden Tent Khanate and Japan. These two countries are now eyeing Xiao Ming covetously. As long as they can hold Xiao Ming back, we can continue to expand our army."

The Prince of Chu nodded continuously. It must be said that this Cao Kun had learned a lot from Western merchants. At least, he had never thought of this before.

He said, "If this plan succeeds, I will make Cao Zhengtong my Chief Clerk. How about it?"

Cao Kun was overjoyed. He bowed and said, "Thank you, Your Highness. I will send someone to Qingzhou Province when I return."
The Prince of Chu nodded in satisfaction upon hearing this.
Having settled this matter, Cao Kun left the Prince of Chu's residence.
Watching Cao Kun depart, the Prince of Chu sighed deeply. If it weren't for survival, why would he cooperate with the French, and with these crude merchants
At the same time, Cao Kun did not return to the Cao Mansion but took a carriage to Lin'an pier.
He had the carriage stop in front of a restaurant at the pier. After looking left and right, he entered the restaurant.
This restaurant was somewhat well-known in Lin'an because Western merchants often frequented it. Upon entering the restaurant, Cao Kun went directly to the third floor. He knocked on the innermost room door. The door opened, revealing a Western face.
"Mr. Manster." Cao Kun was very respectful to the fair-haired, blue-eyed Westerner.
The middle-aged man, referred to as Manster, nodded, a slight smile on his face. He said, "Mr. Cao Kun, welcome."

Entering the room, Cao Kun said seriously, "Mr. Manster, having come this time, what orders have you brought?"
Manster also put away his smile at this point. He picked up a teacup and poured a cup of tea for Cao Kun, saying calmly, "The society is now very uneasy and confused about the development of the Great Yu Empire's technology. This time, I was sent here to ascertain the source of these technologies."
Hearing this, Cao Kun said, "So that's it. But you needn't worry, sir. Both the Prince of Chu and our Cao family have sent people to infiltrate Bowen Academy, and we are also trying to bribe students who come out of Bowen Academy. As long as the benefits are sufficient, I believe this won't be difficult."
Manster said, "Indeed. Ever since the Dutch bought back steam engines from Qingzhou Province, their Parliament is even willing to exchange an earldom for a student from the Great Yu Empire."  Chapter 820
Outside the window, merchant ships came and went at Lin'an pier.
A hint of cunning showed on Cao Kun's face. He asked seemingly casually, "The Dutch Parliament is truly generous. I wonder what price Queen Victoria would be willing to pay in exchange?"

Manster maintained a polite smile. He said, "If you can dedicate all the Great Yu Empire's steam locomotive, steamship, firearm, and artillery manufacturing technologies to the society, I can at least

guarantee you will also hold the status of an Earl in Britain."

Cao Kun helplessly shook his head. Clearly, Manster understood Qingzhou Province's technological development quite well, after all, things like steam locomotives and steamships were openly visible.
But the real difficulty lay in understanding how Qingzhou Province achieved these things.
"This is very difficult," Cao Kun said in a deep voice. "The secrecy of these technologies has always been very strict. The only thing we can rely on is that our students, whom we've placed in Bowen Academy, can bring these technologies back, but this will take time."

Manster gently nodded. "I just hope this time won't be too long. You understand that the society's patience is limited. And you must remember, without our help, your Cao family would not have today's glory. Since you have joined the society, you are forever a member of the society, for our common goal."

"Yes, Mr. Manster, I will do my utmost to serve the society. God bless us." Cao Kun's expression suddenly turned a bit fervent. He extended his right hand, his index and little fingers pointing upwards, with the tips of his other fingers touching and placed on his chest.

Manster returned the gesture with the same hand sign.

After a brief exchange, Cao Kun left the room. Manster then turned to look at the pier outside the window.

When the Dutch transported the single-cylinder reciprocating steam engine back to their country, all of Europe was shocked. Especially for Britain, who developed the steam engine, this shock was unparalleled.

It was at this time that he was dispatched by Queen Victoria to the Great Yu Empire to gather intelligence as a merchant.
However, Queen Victoria did not know that he was also a member of the society. So, upon arriving in the Great Yu Empire, he immediately contacted Cao Kun, who was also a society member.
This Great Yu Empire merchant had been engaged in maritime trade from a very young age. He was selected by the society at that time, which was why he rapidly rose to become the Great Yu Empire's wealthiest merchant.
Otherwise, when Britain ruled the seas, he would not have been able to achieve such things. And at that time, the society needed such a person to establish a foothold in the Great Yu Empire.
Of course, besides Cao Kun, there were also some influential families who were society members in the Great Yu Empire. It was just unfortunate that many of them were killed during this Great Yu Empire Emperor's purge of the country.
"How many secrets does this Great Yu Empire have? I hope the situation isn't too bad," Manster said with some worry.
Europeans, who attached great importance to technology, understood very well that once the Great Yu Empire mastered technology more advanced than Europe, their history of colonization would end.
They might even continuously lose colonies in competition with the Great Yu Empire. Precisely because of this, European countries were now trying to understand the Great Yu Empire and acquire technology from here that even surprised them.

At the same time, feeling a sense of crisis, European royal families once again increased their investment in technology. They were unwilling to be left behind by the Great Yu Empire.
Turning around, Manster picked up a firearm from a box beside the bed. This firearm was a flintlock gun from the Great Yu Empire.
In the war between the Great Yu Empire and the Golden Tent Khanate, some weapons of dead Great Yu Empire soldiers were picked up by barbarian soldiers, and these weapons circulated among the barbarians.
Due to the chaos and hunger, merchants could easily acquire this type of firearm from these barbarian soldiers. After witnessing this forging method, which was even more advanced than European flintlock guns, Manster was so excited he didn't sleep a wink.
From then on, he intensified his efforts to understand the Great Yu Empire's technology. However, what was most important to him were the students of Bowen Academy who possessed technological knowledge in the Great Yu Empire.
As long as he could acquire one talented student, it would be extremely beneficial to both the society and Britain.
Weren't all European countries now trying to steal technology from Britain in this manner?

<b></b>
Qingzhou Province.
Hwang Ja-man, still a bit dazed, sat in the four-wheeled carriage. He and his delegation had just arrived at the Qingzhou pier after traveling all the way from Haigucheng.
When they disembarked, the bustling pier shocked him. If the official responsible for receiving them hadn't explained that this was a pier, he would have thought it was a marketplace.
However, this shock was just the beginning: the flat cement roads extending outside the pier, the fourwheeled carriages with spring suspensions.
Hot air balloons occasionally drifted across the sky. In the fields, horse-powered harvesters and drill seeders were at work. And on the official roads, common people of the Great Yu Empire, dressed in bright, clean clothes, came and went.
After entering the city, Hwang Ja-man and Prince Kim Chang-myung were even more overwhelmed, wishing they had four pairs of eyes to see all the sights of Qingzhou City.
"What a truly prosperous place." Hwang Ja-man sighed deeply. Now he finally understood the disparity between Goryeo and the Great Yu Empire.

Compared to Qingzhou Province, Ryukyo City was merely equivalent to a rural village.
Sitting opposite Hwang Ja-man was an official from the Great Yu Empire's Foreign Affairs Department. There was no need for a high-ranking official to receive the delegation from Goryeo.
The Foreign Affairs Department merely dispatched this translator, who arranged for Hwang Ja-man and his party to stay in an ordinary restaurant in Qingzhou Province.
According to the Foreign Affairs Department, the Wei Family Restaurant would no longer host foreign delegations in the future. After all, one couldn't sacrifice silver for the sake of appearances.
If a foreign delegation wished to enjoy the convenience and comfort of the Wei Family Restaurant, they could simply pay for it themselves.
The carriage stopped in front of the Splendid Restaurant. The translator led Hwang Ja-man and his party into the restaurant. All along the way, the Goryeo delegation sighed in admiration.
In their opinion, the Great Yu Empire's reception of them was extraordinarily grand, because this restaurant was more exquisite and luxurious than any restaurant in Ryukyo City.
And after they entered their rooms, they were even more shocked, unable to close their mouths. The glass windows on all four sides, the ceramic toiletries, and the faucets all genuinely satisfied Hwang Jaman and the Goryeo prince.

"Thank you, Emperor of the Great Yu Empire, for your hospitality. This must be the best restaurant in Qingzhou Province," before Hwang Ja-man could speak, the Goryeo prince, Kim Chang-myung, said with a beaming smile.
He had initially thought Qingzhou Province would be no different from Ryukyo City, but now everything had exceeded his expectations.
The translator smiled helplessly. In fact, when the Wei Family Restaurant's business was booming, all restaurants in Qingzhou Province renovated themselves to resemble the Wei Family Restaurant.
Because now, merchants were accustomed to the Wei Family Restaurant's refined taste; without a series of facilities, they were unwilling to stay. The only difference was the quality of the ceramic products in the rooms.
Thinking to himself that he truly couldn't find a shabbier restaurant to entertain them, the translator smiled and said, "I will convey your sentiments to His Majesty."