

## I. Dynasty 47

### Chapter 47: Foundations of Chemistry

Qingzhou City, Wang Residence.

Wang Chengchou and Sun Yuanzhi sat facing each other in the main hall, with Wang Shijie seated below them.

Ever since Wang Chengchou's visit to the Prince of Qi's residence, Sun Yuanzhi had been waiting at the Wang estate for news. Now that Wang Chengchou had returned and briefly recounted what had transpired, he slowly said, "Brother Wang, that was truly a close call. His Highness did not punish the Wang family, which shows that he still values your family."

"Hmph, of course. Over the past five years, my Wang family has spent so much silver on him. The Prince of Qi will still remember old ties. However, I can no longer read him. This time, we were merely lucky," Wang Chengchou said with lingering fear.

"You're right. His Highness now bears the demeanor of a virtuous prince, and he seems quite close to Administrator Pang. No one understands why," Sun Yuanzhi said, equally puzzled like many others.

Wang Chengchou furrowed his brows. "Such a drastic change in the Prince of Qi must be related to the recent assassination attempt. He must have realized the dangers of the imperial succession struggle and is now trying to build up his power to protect himself."

“Hm, Brother Wang makes a good point. Back then, the Prince of Wei in the south was just as foolish as the Prince of Qi. But after experiencing the brutal reality of the succession struggle, he turned over a new leaf. Now, his fief is one of the most prosperous,” Sun Yuanzhi noted.

“Exactly. So the Prince of Qi is likely following the same path,” Wang Chengchou frowned. “But this means we can no longer manipulate him as we once did. Instead, we’ll have to tread carefully around him.”

“There’s no other choice. Right now, the Qin and Wei families are eyeing us like starving dogs over a bone—they are our true rivals,” Sun Yuanzhi remarked.

Wang Chengchou nodded and sighed. “Ah, so be it. The situation has changed, and we must adapt. Qin Chuanyun will surely try to win His Highness’s favor to counteract the illegal salt allegations. We can’t let them outshine us. I propose that our families each donate 500 plow oxen. What do you think?”

“500 oxen is acceptable, as long as it helps suppress the Qin and Wei families,” Sun Yuanzhi agreed.

“Father, isn’t that a bit too little?” Wang Shijie interjected. “From what I gathered, His Highness seems to have a new business venture in mind—something quite profitable. However, he was vague about whether he would give it to the Qin family.”

Wang Chengchou, having been preoccupied with explaining away the plow oxen issue, had overlooked this. He quickly asked, “Are you certain His Highness said this?”

“Absolutely. His Highness mentioned that this new thing is as profitable as Drunken Qingzhou,” Wang Shijie affirmed.

Sun Yuanzhi's eyes flickered with calculation. Right now, the obvious benefits were being split between the Wang and Qin families. While his Sun family was allied with the Wangs through marriage, he naturally wanted more advantages for himself.

"Brother Wang, in that case, we must seize this opportunity. I'm willing to donate 1,000 plow oxen on my own, but if we gain His Highness's favor, you mustn't forget about the Sun family," Sun Yuanzhi proposed.

"Of course, of course," Wang Chengchou replied happily. Since most of the Wang family's remaining oxen had already been allocated to the government, they had little left. If the Sun family contributed extra, it would be a great help.

With their plan settled, they sent Wang Shijie to deliver the message to the Prince of Qi's residence.

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At the Prince of Qi's residence, Wang Shijie arrived just in time to see Qin Chuanyun leaving. He frowned slightly but proceeded inside after being granted an audience.

In the main hall, Xiao Ming was holding a piece of paper, grinning widely.

Curious, Wang Shijie asked, "Your Highness, what brings you such joy?"

Xiao Ming waved the paper in front of him. “The Qin and Wei families, in support of my Land Cultivation Decree, have each donated 500 plow oxen. They are truly loyal subjects.”

Wang Shijie sneered, “Your Highness, that’s nothing. I have come for the same purpose. Not only has our Wang family contributed its remaining oxen to the government, but along with the Sun family, we are donating an additional 1,500 plow oxen directly to Your Highness.”

Xiao Ming feigned surprise. “Brother Wang, are you serious?”

“Your Highness, how could I dare deceive you? Here is the contract,” Wang Shijie said, handing over a silk document detailing the donation.

“Master Wang and Master Sun are truly generous. I would be remiss if I did not value such loyalty,” Xiao Ming exclaimed in delight.

This time, his joy was genuine—2,500 plow oxen could support 25,000 households, significantly advancing his agricultural production plans.

With a total population of over a million households across the six prefectures, combined with the oxen bought from Ziyan, and those rented by wealthy families, his collective farming system was becoming a reality.

Feeling pleased, Wang Shijie carefully broached his main topic. “Your Highness, earlier today, you mentioned a new product. May I ask what it is?”

Xiao Ming, in high spirits, replied, “This item is called soap, similar to yi zi (traditional animal-fat soap). Do you understand?”

“Yi zi? I do know of it. I was fortunate enough to use it for a while,” Wang Shijie recalled.

Xiao Ming nodded. In the Great Yu Empire, some had already discovered how to make yi zi using pig pancreas and wood ash. However, the process was complicated, and only imperial concubines and nobles could afford it.

Furthermore, traditional yi zi was crude— dark and unappealing due to the use of raw pig fat and ash.

The reason Xiao Ming now intended to produce soap was that he had recently found limestone. With limestone, he could produce alkali, which was essential for mass soap production.

At the same time, this was also the beginning of his chemical industry.

Steel alone could transform an era, but without chemistry, progress would eventually stagnate. Future advancements in alloys, steel refining, and even shipbuilding would all require a strong chemical foundation.

Through soap production, he planned to cultivate a team of chemistry experts and ensure balanced technological growth.

“This soap is far superior to yi zi, and once it reaches Chang’an, nobles will undoubtedly rush to buy it,” Xiao Ming explained.

Wang Shijie’s heart pounded with excitement. Soap production had always been an exclusive secret. Many merchants had dreamed of entering the business, but they simply did not know how to manufacture it.

“Your Highness, this time, you must not favor the Qin family again! Look, we donated 500 more oxen than them, this proves our sincerity,” Wang Shijie urged.

Xiao Ming nodded. “Rest assured, I know what to do. The soap business will go to your Wang family. However, on one condition—you must supply me with oil.”

“Oil? What kind of oil?” Wang Shijie was momentarily confused.

In the Great Yu Empire, while people knew of yi zi, they didn’t realize that animal fats and vegetable oils could be used to make soap. They believed only pig pancreas could be used, severely limiting soap production.

Of course, the other key ingredient was alkali. While Xiao Ming couldn’t yet extract alkali through electrolysis of saltwater, he knew how to make it using traditional methods. This was why he had been so intent on finding limestone—because both limestone and wood ash could be used to produce alkali.