

Civilization 131

Chapter 131 Papermaking, Cotton Armor, and Gifts

As the sun passed its zenith, its cold light illuminated the earth without respite. High above, white clouds drifted far away in the sky, elusive. A gentle autumn breeze swept by, carrying a hint of chill within its dry caress. Under the sunlight, Samurai donned their armor and wielded their weapons, besieging the enemy city with an air of deadly solemnity between heaven and earth.

Leaving the command tent, Xiulote first went to visit his father.

After a month of recuperation, Xiuxoke was able to get out of bed and move around. His complexion showed a slight flush, indicating he was in good spirits.

Xiulote paid his respects to his father, and after briefly exchanging greetings, the conversation naturally turned to Trakel Er who had recently returned to power.

"Father, what kind of person is Elder Trakel Er really?"

Xiuxoke pondered for a moment, gazing at the sky outside the tent before he slowly spoke.

"Elder Trakel Er is the sun in the sky, a symbol of dignity. I have grown up listening to his name. His gaze is above the clouds, never concerning himself with the battles of beasts beneath his feet. His thoughts are as lofty as the clouds, elusive to ordinary minds. One thing that's certain is his strong will! Like the autumn sun, it brings cold and deadly intent from the sky, making his subjects reverently obey, unable to hide from or alter it."

Xiulote mused over this, exchanged a few more words with his father, and then hurriedly left the tent.

He summoned the old carpenter Kuode, whom he hadn't seen for a long time. Ever since taking on the task of making longbows, the old carpenter's status had risen swiftly, and now he had been appointed by Aweit as the army's head Craftsman, with several Samurai providing protection whenever he went out.

"Priest, during the more than twenty days of your expedition, another fifty longbows were made in the camp, and can now be delivered to you."

Kuode reported respectfully, followed by several newly recruited apprentices.

Xiulote nodded. Due to a lack of metal tools and skilled Craftsmen, the production of high-quality longbows was exceptionally slow. Accounting for war damages, they had managed to accumulate only about two hundred. He had already ordered Kuode to recruit more apprentices, centralize more bronze tools, and maximise efficiency. The only way to achieve a breakthrough increase in production was to access the vast population of Craftsmen in the Capital.

"Kuode, select a high-quality longbow for me, add fine decorations and patterns to it, as I want to use it as a gift for the Elder. Also, make a small wooden trebuchet for me, about half the height of a person would do. Lastly, did you do the thing I instructed you before the expedition?"

Kuode called over an apprentice to ask, then smiled and replied.

"Priest, you asked me to soak the excess bark from bow making in a pond with lime water, which has now been soaked for three weeks. As for the fine hemp mats you mentioned, they have been ready for a while."

Under Kuode's guidance, Xiulote made his way to the soaking pond. Indeed, he had harbored the idea of papermaking for a long time. Having given instructions for the soaking process on several occasions, he now finally had both the urgent need and the time to illuminate the technology of papermaking.

It's worth noting that lime water is a necessity for survival in Central America, widely used in the nixtamalization process of corn. Natural corn is not a complete nutritional food, lacking absorbable niacin, or vitamin B3. Making untreated corn the primary food would lead to pellagra and anemia, with serious skin inflammation. Without dietary improvements, sufferers from pellagra would die within five years.

In fact, corn does contain enough niacin, but it is bound with hemicellulose. Soaking and heating corn in lime water can hydrolyze the hemicellulose, thus releasing niacin. This treatment also softens the corn, enhancing its texture, and is a prerequisite step for making delicious masa flour.

Xiulote recalled the process of papermaking. In his memory, the essence of papermaking was: to disperse plant fibers to form pulp, process the pulp for recombination of fibers, and allow the pulp to settle evenly into a sheet of paper.

To disperse the plant fibers and remove impurities, there were soaking, washing, and boiling processes. To recombine the fibers, one had to pound the pulp with manpower or water power into a paste. Finally, to distribute the paper evenly, it was scooped up with bamboo or a hemp mat, then dried and shaped.

This was all Xiulote remembered about the art of papermaking. As for bleaching techniques, paper pulling skills, bamboo paper baking, or the temperature for drying, they were all non-existent to him. He did have an impression of two methods: the fermented and unfermented papermaking, the difference being that the fermented batch needed to be boiled, while the unfermented had to be trampled on.

Xiulote had analyzed that Central America, in its lush tropical environment, had an extensive range of raw materials suitable for papermaking, which could facilitate the development of a large-scale paper industry.

The most common raw materials for papermaking are various kinds of hemp. The cheapest and most widely distributed is jute, which also yields a high output of fibers. Then there's henequen agave used in everyday life; the ropes used by Samurai to capture prisoners are made from henequen. Next is cotton; America is the homeland of cotton, with its various species cultivated over large areas. However, in the different Mexica regions, cotton cloth is often used as currency, thus making it too expensive for paper production.

Then there are various types of bark, like the sandalwood bark currently in use. Central America is not lacking in trees, but what is missing are metal tools for felling trees and stripping bark. Then there is bamboo—there are few types of bamboo in Central America, mainly concentrated in the eastern regions, and while they haven't developed the variety of bamboo products from the Celestial Empire, the indigenous tribes do use bamboo to make blowguns. Lastly, there are various grass materials, such as the reeds along the coastal regions.