## **Civilization 227**

Chapter 227: The Development of Technology (Continued)

Xiulote approached quickly, scrutinizing the armor closely. The brown-grey paper mail in front of him
had a layer of fabric on both the inside and outside, with a thickness reaching half the width of a palm. It
felt soft yet firm to the touch, and he could faintly smell the refreshing scent of paper.

The young man then eagerly looked toward the paper mail Master, Matelar.

"How effective is this paper armor? What does it cost? Is it easy to maintain?"

Telar also caressed the paper armor, smiling as he explained.

"As per Your Highness's instructions, I used fabric as the base, layered with dozens of extremely soft papers, bonded together using a corn ash paste, and then covered with another layer of fabric. Afterward, it was pounded with a stone hammer to compact it into one layer. Then, dozens more papers and a layer of fabric were added, continuing to increase the thickness and strength... This paper armor has a total of four layers!"

While speaking, the armor craftsman used an Obsidian Club to strike it first. The sharp cutting could only tear through the first layer of paper mail, with the second layer being half penetrated. A full-force swing of a bronze axe could slash through three to four layers, but it caused no damage to the wooden frame beneath the fourth layer. Only a full-force thrust of a bronze spear could pierce through all four layers, leaving a shallow mark on the wooden frame. A close-range shot from a Tlaxcalan Bow could only break through two layers, with the impact energy completely absorbed by the paper.

After demonstrating the armor's dry defense capabilities, Malatel thoughtfully pondered and then continued to assess.

"This paper armor is quite light, and its defense depends on two things. First, naturally, the more layers, the stronger the defense. Stacked up to six layers or more, it can even be compared to fabric-covered copper armor! However, if it's that thick, it would severely restrict movement. Second, if the paper armor gets wet, its defense can increase exponentially, becoming impenetrable to an axe!"

As he spoke, the armor craftsman asked his apprentice to bring over a large bucket of water and evenly poured it onto the paper armor. The paper armor gradually absorbed the water until it was completely sodden, feeling wet to the touch. Then, Xiulote personally swung the copper axe to chop at it, but the section that was cut felt too soft to hold any force and was completely uncuttable. Even when he switched to a copper spear, he could only pierce it slightly.

Seeing this, the young man finally nodded, satisfied. After a moment's thought, he shook his head.

"Malatel, your design is a simplified version of the fabric-covered paper armor, using only paper pulp as the filling material within the fabric. Next, it'll need to be soaked in oil to alter the paper's structure and prevent it from becoming damp and rotting. Then, paint should be applied to the outer layer to prevent the absorption of too much moisture that would scatter the paper pulp, and finally, apply lime to prevent burning."

"However, a truly excellent paper mail needs to be soaked in oil for several months, painted several layers inside and out, and then blended with lime. The key areas are nailed with metal, with paper pulp forged into pieces, as firm as hardwood, comparable to iron armor, and also waterproof and moisture-proof... But, such a manufacturing process would be prohibitively expensive, so let's stick to your design!"

Hearing this, Malatel bowed his head in acknowledgment,	his silent smile broadening as he continued
his introduction	

"Your Highness, this kind of fabric-covered paper armor is not difficult to produce, and apprentices can also participate in its making. However, it requires a huge quantity of paper and is quite labor-intensive to hammer into shape. Maintenance and repair are easy, just adding paper and fabric will suffice. Normally, we need to be careful with fire, but during the rainy season, there's no need to worry."

Xiulote fell into deep thought again, his eyes sparkling with insight.

As papermaking technology advanced, paper armor began to be used on a large scale during the Tang and Song dynasties, becoming the standard armor for local military forces during the Song Dynasty. In this era, the lower-ranked soldiers of the Ming army were mostly equipped with paper armor, especially among the naval forces.

In reality, paper armor is light and waterproof, with its defense strengthening when wet, making it highly suitable as standard equipment for naval forces. During the lengthy rainy season in Mexica, paper armor could also play to its strengths, without the worry of rust like metal armor. Hmm, there might be a need to watch out for insects.

Technically speaking, there is almost no difficulty in manufacturing paper armor. As long as there is an ample supply of raw materials and manpower, it can easily be mass-produced. This armor's role is actually quite similar to that of cotton armor. However, in this era of low productivity, cotton cultivation and output are limited after all, and cotton fabric even circulates as currency in Central American society, making it less accessible than papermaking materials.

Common raw materials for papermaking include bamboo, Luwei, tree bark, long grass, and jute, none of which require arable land and can be managed with human resources during farming downtimes, fully leveraging the manpower advantage of the Mexica Alliance.
After careful consideration, Xiulote made a decision to list paper armor as standard issue, popularizing it among the longbow militia and spear militia soon to be formed, and also to reinforce the naval forces.
"Malatel, the role of this armor is for mass distribution to arm thousands of elite militia. Similar to the standard cotton armor, it only needs to effectively withstand the samurai's war club in a battle! I need the cheapest two types: double-layered paper armor for the elite militia and single-layered paper armor for the naval forces."
Following this line of thought, prepare yourself, Malatel. Compile the paper armor's manufacturing methods in detail. Soon, I will establish a specialized workshop, diverting hundreds of craftsmen to mass-produce paper armor. You can recommend someone to manage the workshop!"
Xiulote issued the order solemnly.
Malatel thought for a moment, respectfully bowing his head to accept the command. He still had to develop new-type armors, so it was the perfect opportunity to promote his top apprentice who had followed him all the way from the Holy City. Thinking this, the armor craftsman's smile broadened, and the scars on his face also pulsated cheerfully.

After that, he rose and moved to a meticulously woven yellow-brown rattan armor, introducing it again

with a smile.

"Your Highness, this is the rattan armor made according to your wishes. The Alliance has a tradition of using Green Vine to make shields, and there are some old vines in stock. I have woven this rattan armor using the old vine, which took quite some time, with the most challenging part being the handling of the joints. Fortunately, the finished product is very light, tough to penetrate with clubs or axes, and offers excellent defense!"