

generally accurate author asserted. In popular lists ι frequently is given as **Talitha**. Hyde strangely rendered the original words of Ulug Beg as the *Vertebrae* of the Greater Bear,—whence probably Smyth's statement,—or the Cavity of the Heel, which, from the star's position in the figure, is a much more likely translation.

In China these two stars were **Shang Tae**, the High Dignitary.

Holden says of ι that its "companion is suspected to be a planet." It is 12" distant from the larger, and the orbital revolution is very slow.

λ , 3.7, and μ , 3.2, red.

These are our **Tania borealis** and **Tania australis**; and together were the Arabs' **Al Kafzah al Thāniyah**, the Second Spring (of the Gazelle), marking the Bear's left hind foot. Baily has them in his edition of Ulug Beg's *Tables*, from Hyde's Latin translation, as **Al Phikra al Thānia**,—in the original **Al Fikrah**, the Vertebra; but this, more probably, is entirely wrong, as these three pairs of stars have always marked three of the Bear's feet.

In China they were **Chung Tae**, the Middle Dignitary.

ν , Double, 3.5 and 12, orange and cerulean blue,

ξ , Binary, 3.9 and 5.5, subdued white and grayish white,

mark the right hind foot, and are the southern of the three noted pairs.

They were the Chinese **Hea Tae**, the Lower Dignitary.

The components of ξ are but 1" apart, with a position angle of 300° .

ν , the northern one of the two stars, is **Alula borealis**, from **Al Kafzah al Ūla**, the First Spring.

ξ is **Alula australis**, the southern one in the combination,—Ulug Beg's **Al Fikrah al Ūla**. Ideler's **Awla**, and Burritt's **Acola**, are erroneous.

This, with ζ Herculis and γ Virginis, was the most prominent of the double stars discovered to be binary systems by Sir William Herschel in his investigations for stellar parallax, when (I quote from Professor Young),

to use his own expression, he "went out like Saul to seek his father's asses, and found a kingdom,"—the dominion of gravitation extended to the stars, unlimited by the bounds of the solar system.

ξ was the first binary of which the orbit was computed,—by Savary in 1828,—having a period of sixty-one years, and has already made more than a complete revolution since its discovery. The components are about 2" apart, with a position angle in 1898 of $162^\circ.7$.