

It was near  $\gamma$  that the Capuchin friar of Cologne, Schyraelus de Rheita,<sup>1</sup> in 1643, thought that he had found five new satellites attendant upon Jupiter, which he named *Stellae Urbani Octavi* in compliment to the reigning pontiff; and a treatise, *De novem Stellae circa Jovem*, was written by Lobkowitz upon this wonderful discovery. "The planet, however, soon deserted his companions, and the stars proved to be the little group in front of the U $\rho$ n."

$\delta$ , 3.4,

the **Scheat** of Tycho, and **Scheat Edeleu** of Riccioli, is **Skat** in modern lists, and variously derived: either from Al Shi'at, a Wish, said to be found for it on Arabic globes; or from Al Şāk, the Shin-bone, near which it is located in the figure. But Hyde, probably following Grotius, said that it was from Al Sa'd of the preceding stars.

On the Euphrates it seems to have been associated with Hasisadra or Xasisadra, the 10th antediluvian king and hero of the Deluge; while, with  $\beta$ ,  $\kappa$ , and others adjacent, it was the lunar station **Apin**, the Channel, and individually the Star of the Foundation. The corresponding stations, **Khat-sar** in Persia, **Shawshat** in Sogdiana, and **Mashtawand** in Khorasmia, were also determined by this star.

The Chinese knew it, with  $\tau$ ,  $\chi$ , the three stars  $\psi$ , and some in Pisces, as **Yu lin Keun**, the Imperial Guard.

From near  $\delta$  issues a meteor stream, the **Delta Aquarids**, from the 27th to the 29th of July, and not far away Mayer noted as a fixed star, on the 25th of September, 1756, the object that nearly twenty-five years later Sir William Herschel observed as a comet, but afterwards ascertained to be a new planet, our Uranus.

$\epsilon$ , 3.4,

was **Al Bali**, the brightest one of the 21st *manzil*, **Al Sa'd al Bula'**, the Good Fortune of the Swallower, which included  $\mu$  and  $\nu$ ; these last also known as **Al Bula'an** in the dual. Kazwini said that this strange title came from the fact that the two outside stars were more open than  $\alpha$  and  $\beta$  of Capricorn,

<sup>1</sup> De Rheita is more deservedly famous as a supposed inventor, in 1650, of the planetarium, an honor also claimed for Archimedes of the 3d century before Christ, for Posidonius the Stoic, mentioned by Cicero in *De Natura Deorum*, and for Boëtius about the year A. D. 510. This instrument is the orrery of modern days, named by Sir Richard Steele after Charles Boyle, Earl of Orrery, for whom one was made in 1715 by Rowley, from designs by the clock-maker George Graham. Professor Roger Long constructed one eighteen feet in diameter, in 1758, for Pembroke Hall, Cambridge, where it probably still remains; and Doctor William Kitchiner mentioned one by Arnold, annually exhibited in London about the year 1825, that was 130 feet in circumference.

so that they seemed to swallow, or absorb, the light of the other! The corresponding *sieu*, **Mo**, **Mu**, **Niu**, **Nü**, or **Woo Nen**, a Woman, anciently written **Nok**, was composed of these stars with the addition of another, unidentified,  $\epsilon$  being the determinant; and the same three were the Euphratean lunar asterism **Munaxa**, the Goat-fish, and the Coptic **Upenritos**, the Discoverer.

Bayer mentioned for it **Mantellum** and **Mantile**, marking the Napkin or Towel held in the youth's hand; but in some early drawings this was shown as a **Bunch of Grain Stalks**.

Grotius had **Ancha** and **Pyxis**, but neither appropriate; while in our day the former is applied only to  $\theta$ , and the latter is never seen as a stellar title except in La Caille's *Pyxis Nautica* in Argo.

Eastward from  $\epsilon$ , near  $\nu$ , is the **Saturn Nebula**, N. G. C. 7009, that the largest telescopes show somewhat like the planet.

$\zeta$ , Binary, 4 and 4.1, very white and white.

Although unnamed, this is an interesting star at the centre of the Y of the Urn, and almost exactly on the celestial equator.

Mayer discovered its duplicity in 1777, and its binary character, first noted by Herschel in 1804, was confirmed by his son in 1821; but the period is not yet determined, although it is very long.

The components are  $3''.3$  apart, and the position angle  $322^\circ$ .

$\theta$ , 4.3,

is **Ancha**, the Hip, although on most modern atlases the star lies in the belt on the front of the figure. The word is from the Latin of the Middle Ages, and still appears in the French *hanche*, our haunch.

Reeves says that in China it was **Lei**, a Tear.

$\kappa$ , 5.5.

**Situla** is applied to this, from the classical Latin term for a Water-jar or -bucket, the later Arabian word being the somewhat similar **Satl**, and the earlier **Al Dalw**.

Gassendi, however, derived it from *sitis*, thirst, the Waterman's Urn having been figured by some as an Oven!

Theon the Younger, father of the celebrated Hypatia of our 5th century, termed this star *'Οινοχοεία*, the Outpouring of Wine, as if by Ganymede; and others, *Κάλη*, and **Urna**, the southern edge of which, near the outflow, it marks.