

It lies just south of θ , inclosed in faint nebulosity. The two larger stars are $11''.5$ apart, with a position angle of 142° ; the 11th-magnitude companion is $49''$ away, at a position angle of 103° .

η , 2.4,

located near the right knee, was appropriately described by the Arabic astronomers as **Rijl Jauzah al Yamnā'**, the Right Leg of the Jauzah, but we now know it as **Saiph**, from Al Saif, the Sword, although it is at some distance from that weapon, and the name really belongs to η , ι , and stars near by.

In his vast Head immerst in boundless spheres
Three Stars less bright, but yet as great, he bears.
But further off remov'd, their Splendor's lost.

Creech's *Manilius*.

λ , Double, 3.8 and 6, pale white and violet.

Al Maisān, the title of γ Geminorum, by some error of Firuzabadi was applied to this star as **Meissa**, and is now common for it. Al Sufi called it **Al Tahāyī**; but Al Ferghani and Al Tizini knew it as **Rās al Jauzah**, the Head of the Jauzah, which it marks.

The original Arabic name, **Al Hak'ah**, a White Spot, was from the added faint light of the smaller ϕ^1 and ϕ^2 in the background, and has descended to us as **Heka** and **Hika**. These three stars were another of the Athāfiyy of the Arabs; and everywhere in early astrology were thought, like all similar groups, to be of unfortunate influence in human affairs.

They constituted the Euphratean lunar station **Mas-tab-ba-tur-tur**, the Little Twins, a title also found for γ and η Geminorum; and individually were important stars among the Babylonians, rising to them with the sun at the summer solstice, and, with α and γ , were known as **Kakkab Sar**, the Constellation of the King. In other lunar zodiacs they were the Sogdian **Marezānā**, and the Khorasmian **Ikhma**, the Twins; the Persian **Aveqr**, the Coronet; and the Coptic **Klusos**, Watery. They also were the 3d *mansil*, **Al Hak'ah**; the *sieu Tsee*, or **Tsuy He**, the Beak, or Pouting Lips, anciently **Tsok**, which Reeves gave as **Keo**; and the *nakshatra* **Mrigaqiras**, or **Mriga-qirshā**, the Head of the Stag,—Soma, the Moon, being its presiding divinity, and λ the junction star towards Ārdrā, and its determinant. As to this lunar station Professor Whitney very reasonably wrote:

It is not a little strange that the framers of the system should have chosen for marking the 3d station this faint group, to the neglect of the brilliant and conspicuous pair β and

ζ Tauri, the tips of the Bull's horns. There is hardly another case where we have so much reason to find fault with their selection.

But they were possibly influenced by recollection of the fact that the vernal equinox lay here 4500 B. C. In addition to the customary Hindu title, Weber mentioned **Andhakā**, Blind, apparently from its dimness; **Āryikā**, Honorable, or Worthy; and **Invakā**, of doubtful meaning, sometimes read **Invalā**.

In China these stars were **Sī ma ts'ien**, the Head of the Tiger.

Ulug Beg, as well as Naṣr al Dīn, likened the group to the letter of the Persian alphabet that was similar in form to the Greek Α. La Lande wrote of them:

qui ressemblent à un jeu de trois noix, ce qui a fait appeller cette constellation Nux, ou Juglans, Stella jugulā.

Hipparchos did not allude to them, but Ptolemy called them *δ νεφελοειδής*, the Nebulous One, for such is their appearance to the casual observer, and has been their designation in all early catalogues, even to Flamsteed's in his *in capite Orionis nebulosa*.

Although called double, λ has a second faint companion 149" above it, visible by a 3½-inch glass; and another, of the 12th magnitude, 27" distant. The two largest stars are 4".2 apart, at a position angle of 40°.3.

λ and the two stars *phi* furnish an easy refutation of the popular error as to the apparent magnitude of the moon's disc, Colas writing of this in the *Celestial Handbook* of 1892:

In looking at this triangle nobody would think that the moon could be inserted in it; but as the distance from λ to φ¹ is 27', and the distance from φ¹ to φ² is 33', it is a positive fact;

the moon's mean apparent diameter being 31' 7". This illusion, prevalent in all ages, has attracted the attention of many great men; Ptolemy, Roger Bacon, Kepler, and others having treated of it. The lunar disc, seen by the naked eye of an uninstructed observer, appears, as it is frequently expressed, "about the size of a dinner-plate," but should be seen as only equal to a peppercorn, or as a circle a half-inch in diameter fifty-seven inches away; or, to write it astronomically, equal to the planet Jupiter viewed at opposition through a telescope magnifying forty diameters; or equal to Mars magnified seventy-four times when at his nearest approach to the earth and distant thirty-four millions of miles. To still better illustrate this, Professor Young tells us that the planet Venus,

when about midway between greatest elongation and inferior conjunction, has an apparent diameter of 40", so that, with a magnifying power of only 45, she looks exactly like the moon four days old, and of precisely the same apparent size.

ν , 4.7, and ξ , 4.6,

were the Chinese **Shwuy Foo**, a Water-depot.

They mark Orion's right hand, ξ being the radiant point of the fine meteor stream, the **Orionids**, of the 18th of October.

σ^1 , σ^2 , π^1 , π^2 , π^3 , π^4 , π^5 , π^6 , and g ,

all of the 4th to the 5th magnitudes, in a vertical line at the right of the figure, indicate the lion's skin; but Al Tizini said that they were the Persians' **Al Tāj**, the Crown, or Tiara, of their kings; and the Arabians' **Al Kumm**, the Sleeve of the garment in which they dressed the Giant, the skin being omitted.

Ulug Beg called them **Al Dhawāib**, Anything Pendent; and the Borgian globe had the same, perhaps originated it; but Al Sufi's title was **Manica**, a Latin term for a protecting Gauntlet; and Grotius gave a lengthy dissertation on the **Mantile** which some anonymous person applied to them, figured as a cloth thrown over the Giant's arm.

With Pliny these stars in the lion's skin are supposed to have been a separate constellation known as the **Shield**, made from the bull's hide of the Hyrean legend.

They were the Chinese **Tsan Ke**, the Three Flags.

τ , 3.6, lies just north of Rigel, and was known in China as **Yuh Tsing**, the Golden Well.

υ , 4.7.

Thabit is Burritt's name for an unlettered star on his *Atlas*, the ν of Heis.

It lies on the lower edge of the tunic, but I cannot learn the derivation or history of the title, although the Arabic Al Thābit signifies the "Endurer."

★

Junonis volucrem, quae caudā sidera portat.

Ovid's *Metamorphoses*.

Pavo, the Peacock,

lying south of Sagittarius and the Southern Crown, is one of Bayer's twelve constellations, and the Italian **Pavone**, the French **Paon**, the German **Pfau**.