

δ , ϵ , π , ρ , and σ were the Chinese **Tien Choo**, Heaven's Kitchen.

ζ , a 3d-magnitude, was **Al Dhi'bah**, that we have also seen for α .

The Chinese knew it as **Shang Pih**, the Higher Minister.

Half-way between it and δ , within $7'$ of the planetary nebula N. G. C. 6543, is the north pole of the ecliptic; the south pole being in the head of Dorado. Denning considers ζ the radiant point of the meteor streams of the 19th of January and of the 28th of March.

η , a double 2d- and 8th-magnitude, deep yellow and bluish star, was known in China as **Shang Tsao**, the Minor Steward.

The components are about $5''$ apart, and the position angle is $143^\circ.1$.

ζ and η together were **Al Dhi'bain**, the **Duo Lupi** of early works, the Two Hyaenas or Wolves, lying in wait for the Camel's Foal, the little star **Al Ruba'**, protected by the Mother Camels, the larger stars in our Draco's head. They also were **Al 'Auhakān**, the Two Black Bulls, or Ravens, the Arabic signifying either of these creatures; but this last word likewise appears for ω and f , and for χ and ψ ; all of these titles being from Arabia's earliest days.

θ , a 4.3-magnitude, is **Hea Tsao**, the Lowest Steward; while the smaller stars near it were **Tien Chwang**.

ι , 3.6, orange.

Smyth mentioned this as **Al Dhiba'** of the Dresden globe and of Ulug Beg, but Kazwini had called it **Al Dhih**, the Male Hyaena, from which comes **Ed Asich**, its usual title now, the **Eldsich** of the *Century Cyclopaedia*.

In China it was **Tso Choo**, the Left Pivot.

It marks the radiant point of the **Quadrantid** meteors of the 2d and 3d of January, so called from the adjacent Mural Quadrant.

A 9th-magnitude pale yellow companion is $2'$ distant.

λ , 4.1, orange.

Giansar and **Giauzar** are variously derived: either from **Al Jauzā'**, the Twins,—a little star is in close proximity,—or from **Al Jauzah**, the Central One, as it is nearly midway between the Pointers and Polaris; or, and still better, from the Persian **Ghāuzar**,—**Al Birūnī's** **Jauzahar** of Sāsānian origin,—the Poison Place, referring to the notion that the nodes, or points where the moon crosses the ecliptic, were poisonous because they "happened to be called the Head and Tail of the Dragon." This singular idea descended into comparatively modern times, and, although these points are far re-

moved from Draco, still obtains in the name for λ . **Jusa** is another popular title.

It also has been known as **Nodus secundus**, the Second Knot, possibly because thus located on some drawings; yet it is far removed from δ , which usually bears that name.

In China it was **Shang Poo**, or **Shaou Poo**.

Although the last lettered star in the figure, it lies at a considerable distance from the end, as figured on the atlases of Heis and Argelander.

μ , Binary, 5 and 5.1, brilliant white and pale white.

Al Rāḥia, from Ulug Beg's catalogue, turned into **Arrakis** and **Errakis**, generally has been thought to signify the Dancer, perhaps to the neighboring Lute-player, the star β ; but here probably the Trotting Camel, one of the group of those animals located in this spot. Ideler added for it **Al Rāḥad**, the Camel Pasturing Freely, that the original, differently pointed, may mean. The little star in the centre of the group of Camels, β , γ , μ , ν , and ξ , is named **Al Ruba'** on the Borgian globe, although almost invisible; but did not appear in the catalogues till Piazzi's time, except with Julius Schiller in his *Coelum Stellatum Christianum* of 1627, where it is the 37th star in his constellation of the Holy Innocents.

Assemani mentioned μ as **Al Ca'ab**, the Little Shield or Salver, but gave no reason for this, and its inappropriateness renders the claim very doubtful.

In modern drawings it marks the nose or tongue of Draco.

The components are $2''.5$ apart, with a position angle of 165° ; and their period is long, although not yet accurately determined.

ν , on the Dragon's head, already mentioned in connection with β , γ , μ , and ξ , is an interesting double for a small telescope. The components are each of 4.6 magnitude, about $62''$ apart, with a position angle of 313° .

According to Wagner's determination of the parallax,—not yet, however, confirmed,—they are near neighbors to us, at a distance of about eleven light years.

ξ , 3.8, yellow,

was one of the Herd of Camels; but its modern individual name, **Grumium**, is the barbarism found for it in the *Almagest* of 1515, an equivalent of $\gamma\acute{\epsilon}\nu\upsilon\varsigma$ used by Ptolemy for the Dragon's under jaw. The word is now seen in the Italian *grugno* and the French *groin*.

Bayer followed Ptolemy in calling the star **Genam**.