

Birūnī's **Al Fargh al Awwal**, the First, or the Upper, Spout; and the 24th *sieu* was these same stars known as **Ying She**, or **Shih**, a House, anciently **Sal** and **Shat**; but it also comprised parts of Aquarius and Capricornus. They also were the Persian **Vaht**, the Sogdian and Khorasmian **Farshat Bath**, and the Coptic **Artulos**, all signifying something pertaining to Water; while in astrology  $\beta$  indicated danger to mankind from that element.

Within the area of this Square Argelander counted only about 30 naked-eye stars, but in the clearer sky of Athens Schmidt saw 102.

It was in the 24th *sieu* that the Chinese record a conjunction of the planets Mercury, Mars, Jupiter, and Saturn, on the 28th of February, 2449 B. C., according to Bailly's computations; but we sometimes see this statement made as to five planets, Venus being added, and as having taken place on the 29th of February, that year being bissextile. Smyth indefinitely mentions this conjunction as at some point between  $\alpha$  Arietis and the Pleiades; Flammarion states that it was in Capricorn; and Steele alludes to it as of 2246 B. C., and between the tenth and eighteenth degrees of Pisces. At that date the signs and constellations were about coincident.

The variability of  $\beta$  was discovered by Schmidt in 1847, and Argelander found a period of forty-one days; but Schoenfeld thinks that irregular oscillations, in a period of thirty to fifty days, are more probable.

The spectrum of Scheat is of the third type of Secchi's classification, which includes the red and orange stars and most of the variables: " $\alpha$  Orionis,  $\alpha$  Herculis, Antares, and  $\sigma$  Ceti (Mira) are good examples."

The star is receding from us about four miles a second.

$\gamma$ , 3, white,

erroneously placed by Tycho in Pisces, marks the extreme tip of the Horse's wing, so that its name **Algenib** has been considered as derived from **Al Janāh**, the Wing, but it probably is from **Al Janb**, the Side. It has sometimes been written **Algemo**. Al Birūnī quoted it, with  $\delta$  ( $\alpha$  Andromedae), as **Al Fargh al Thānī**, the Second, or Lower, Spout, *i. e.* of the Bucket. This also is the title of the 25th *manzil*, but appears in Professor Whitney's list as **Al Fargh al Mu'hir**, the Rear Spout, and in Smyth's as **Al Fargu**.

Chrysococca called it  $\Pi\eta\gamma\alpha\sigma\varsigma$  from the constellation.

Reeves said that it is the Chinese **Peih**, a Wall or Partition, thus taking the title of the 25th *sieu*, which it marked and, with  $\delta$ , constituted. It lies at the junction of the *nakshatras* Bhādrapadā and Revatī; and, with  $\delta$ , was included in the corresponding lunar station of several other nations.

With the same star and  $\beta$  Cassiopeiae it makes up the **Three Guides**, all these being almost exactly on the prime meridian, the vernal equinox lying in a starless region of Pisces about  $15^\circ$  south of  $\gamma$  Pegasi. Two 11th-magnitude stars are close by.

$\delta$ , 2.2, white.

This, as already noted, is the same as Alpheratz ( $\alpha$  Andromedae), and recognized by astronomers of every age as in either constellation; or, as Aratos wrote,  $\xi\nu\nu\acute{o}\varsigma \acute{\alpha}\sigma\tau\acute{\eta}\rho$ , "a common star." It seems to be unnamed as a member of Pegasus.

Al Achsasi included it with  $\gamma$  in the Fargh al Mu'hir.

$\epsilon$ , Triple, 2.5, 11.5, and 8.8, yellow, —, and blue.

**Enif**, **Enf**, and **Enir**, all titles for this, are from **Al Anf**, the Nose, by which the Arabians designated it. Scaliger had **Enf Alphas**, and Schickard **Aniphol Pharasi**. It was also **Fum al Faras**, the Horse's Mouth; and **Al Jahfalalah**, the Lip, this last being found on one of their globes.

Bayer quoted from "the interpreters of the *Almagest*" **Gramium** and **Muscida**, respectively Jaw and Muzzle, so describing its position; but these have become proper names for  $\xi$  Draconis and  $\pi$  Ursae Majoris. Flamsteed knew it as **Os Pegasi**.

With  $\theta$ , and the star  $\alpha$  Aquarii, it was the 23d *sieu*, **Goei**, or **Wei**, Steep or Danger, anciently **Gui**.

Enif's spectrum is Solar, and it is receding from us about five miles a second. Gould thinks it probably variable.

$\zeta$ , 3.7, light yellow.

**Homan** seems to have been first given to this in the *Palermo Catalogue*, from **Sa'd<sup>1</sup> al Humām**, the Lucky Star of the Hero, in which Ulug Beg included  $\xi$ ; other lists have **Homan**. But Hyde said that the original was **Al Hammām**, the Whisperer. Al Tizini mentioned it as **Sa'd al**

<sup>1</sup> This Arabic Sa'd is our "Good Luck" and a component word of many titles in the Desert sky, all of which seem to have been applied to stars rising in the morning twilight at the commencement of the pleasant season of spring. **Al Sa'dain**, the dual form, was the title for Jupiter and Venus, the Two Fortunate Planets; **Al Nahsan**, the Unlucky, referring to Mars and Saturn.