three-jointed arrow — the Belt stars — shot by the avenging Hunter, Sirius, which even now is seen sticking in his body. This hero was the father of twenty-seven daughters, the wives of King Soma, the Moon, with whom the latter equally divided his time, thus referring to the *nakshatras*.

The Chinese made up their 4th *sieu* from the seven conspicuous stars in the shoulders, belt, and knees of Orion, with the title **Shen,** or **Tsan,** Three Side by Side, anciently **Sal,** which may have originated from the Belt having at first alone formed the *sieu*. Indeed, the lunar asterism was mentioned in the *She King* as the **Three Stars.** δ was its determinant; but it overlapped the corresponding *nakshatra*, although entirely distinct from the 4th *manzil* in the feet of the Twins. Orion was worshiped in China during the thousand years before our era as **Shen,** or **Shí Ch'en,** from the moon station; but it also was known as the **White Tiger,** a title taken from the adjacent Taurus.

The Khorasmians adopted Orion's stars as a figure of their zodiac in place of Gemini.

The early Irish called it **Caomai,** the Armed King; the Norsemen, **Orwandil;** and the Old Saxons, **Ebuŏrung,** or **Ebiŏring,**— words that Grimm thought connected with Iringe, or Iuwaring, of the Milky Way.

Caesius cited the singular title **Ragulon,** perhaps from Al Rijl, the Arabic designation for the star β, but he made this the equivalent of the Latin *Vir,* the Man *par excellence,* the Hero; and suggested that Orion represented **Jacob** wrestling with the angel; or **Joshua,** the Hebrew warrior; but Julius Schiller, that it was **Saint Joseph,** the husband of the Blessed Virgin. Weigel figured it as the Roman **Two-headed Eagle;** and De Rheita, of 1643, found somewhere among its stars **Christ's Seamless Coat** and a **Chalice;** but he was addicted to such discoveries.

Argelander has 115 stars here; Heis, 136; and Gould, 186; while the whole is as rich in wonderful telescopic objects as it is glorious to the casual observer. Flammarion calls it the **California of the sky.**

α, Irregularly variable, 0.7, orange.

Betelgeuze is from **Ibṭ al Jauzah,** the Armpit of the Central One; degenerated into **Bed Elgueze, Beit Algueze, Bet El-geuze, Beteigeuze,** etc., down to the present title, which itself also is written **Betelgeuse, Betelguese, Betelgueze, Betelgeux,** etc. The *Alfonsine Tables* had **Beldengeuze,** and Riccioli, **Bectelgeuze** and **Bedalgeuze.**

The star also was designated by various Arabian authors as **Al Mankib,** the Shoulder; **Al Dhirā',** the Arm; and **Al Yad al Yamnā',** the Right Hand,

—all of the Giant; but Chilmead wrote "**Ied Algeuze,**— that is, Orion's Hand," quoted from Christmannus.

The title **Mirzam,** from **Al Murzim,** the Roarer, or perhaps the Announcer, originally used for γ, also is applied to this as heralding the rising of its companions. La Lande, borrowing the full name of that star for this, quoted it as **Almerzamo nnagied.**

Sayce and Bosanquet identify a with the Euphratean **Gula,** other stars possibly being included under this title; and Brown says that **Kakkab Sar,** the Constellation of the King, or **Ungal,** refers to a with γ and λ. We can see in this signification the origin of the astrologer's idea that Betelgeuze portended fortune, martial honors, wealth, and other kingly attributes.

a alone constituted the 4th *nakshatra,* **Ārdrā,** Moist, depicted as a Gem, with Rudra, the storm-god, for its presiding divinity, and so, perhaps, the origin of the long established stormy character of Orion. This lunar station, therefore, formed but a part of the 4th *sieu,* and differed entirely from the 4th *manzil.* Individually the star was the Sanskrit **Bāhu,** Arm, probably from the Hindu conception of the whole figure as a running Stag, or Antelope, of which a, β, γ, and κ marked the legs and feet, with a on the left forearm; the adjacent Sirius being the hunter Mrigavyādha.

Brown mentions its equivalent Persian title, **Besn,** the Arm, and the Coptic **Klaria,** an Armlet.

Bayer quoted $\gamma\lambda\acute{\eta}\nu\epsilon\alpha$ from Aratos, but it is not in the original; and Chrysococca had $'\Omega\mu o\varsigma$ $\delta\iota\delta\acute{\upsilon}\mu\omega\nu$, the Shoulder of—*i.e.* next to—the Twins.

Among the many queerly worded descriptions in the 1515 *Almagest,* perhaps none is more so than that of this star, reading in part thus: *ipsa tendit ad rapinam quae appropinquat ad terram.* This *tendit ad rapinam,* also used for the star Antares, apparently has been an unsolved puzzle ; and as I have never seen any explanation, my own suggestion may not be amiss. The 1515 *Almagest* followed Ulug Beg's *Tables,* and these followed Ptolemy, who characterized the color of a as $\upsilon\pi\acute{o}\kappa\iota\rho\rho o\varsigma$, which Ulug Beg's translator turned into *rubedinem,* "ruddiness," and the *Almagest* into the not very different word of the quotation, expressing ideas of war and carnage, astrology's attributes of red stars. The *appropinquat ad terram* doubtless refers to the comparatively low elevation of the star above the horizon.

Professor Young says that at times, when near a minimum, it closely matches Aldebaran in color and brightness, and Lassell described it as a rich topaz. Secchi makes it the typical star of his third class with a banded spectrum, suggesting that it may be approaching the point of extinction. Elkin finds its parallax insensible; according to Vogel, it is receding from the earth at the rate of $10\frac{1}{2}$ miles a second.

It was first seen to be variable by Sir John Herschel in 1836, from which time till 1840 "its variations were most marked and striking." A similar period began in 1849, and on the 5th of December, 1852, "it was actually the largest star in the northern hemisphere." It was especially brilliant in 1894. Argelander found a period of 196 days, but Schoenfeld thought periodicity questionable.

Its position is less than 3° west of the solstitial colure; it rises at sunset on the 30th of December, and culminates on the 29th of January. It has an 8th-magnitude companion 20′ away, first observed by Wilhelm Struve as double, 18″.5 apart, and the great glasses of the present day reveal other members in the combination still nearer and smaller than the original companion; while Barnard has discovered about it large and diffused nebulosity.

β, Double, 0.3 and 8, both bluish white.

Algebar and **Elgebar** are seen in poetry for this star, but it universally is known as **Rigel,** from **Rijl Jauzah al Yusrā**, the Left Leg of the Jauzah, by which extended title the Arabians knew it after the word Jauzah had become a personal title; the modern name first appearing in the *Alfonsine Tables* of 1521. These say of it, in connection with Eridanus:

Lucida que est in pede sinistro : et est communis ei et aquae : et dicitur Algebar nominatur etiam Rigel.

Riccioli had **Regel**; Schickard, **Riglon**; and Chilmead, **Rigel Algeuze,** or **Algibbar**.

Al Sufi gave the earlier popular name **Rāï al Jauzah,** the Herdsman of the Jauzah, whose camels were the stars a, γ, δ, and κ; and **Al Najīd,** the Conqueror, which also was given to a and γ.

Chrysococca termed it Ποῖς δίδυμων, the Foot of — *i.e.* next to — the Twins; and Bayer, the Hebrew **Kesil,** of the constellation.

Smyth wrote that

independent of the " *nautis infestus Orion* " character of the constellation, Rigel had one of his own; for it was to the astronomical rising of this " *marinus aster,*" in March, that *St. Marinus* and *St. Aster* owe their births in the Romish calendar.

He gave, however, no explanation of this, and these saints certainly are not familiar in any stellar connection. Possibly its " marine " character came from its location at the end of the River, and from its being given in the various editions of the *Syntaxis* and in the *Alfonsine Tables* as common