as among the symbols of Mithraic worship, but how their Lion agreed, if at all, with ours is not known.

One of the sultans of Koniyeh, ancient Iconium, put the stellar figure on his coins.

Its drawing has generally been in a standing position, but, in the *Leyden Manuscript*, in a springing attitude, with the characteristic **Sickle** fairly represented. Young astronomers know the constellation by this last feature in the fore parts of the figure, the bright Regulus marking the handle; its other stars successively being η, γ, ζ, μ, and ε. Nor is this a recent idea, for Pliny is thought to have given it separately from Leo in his list of the constellations; but not much could have been left of the Lion after this subtraction except his tail.

These same Sickle stars were a lunar asterism with the Akkadians as **Gis-mes**, the Curved Weapon; with the Khorasmians and Sogdians as **Khamshish**, the Scimetar; but with the Copts as **Titefui**, the Forehead.

The sun passes through Leo from the 7th of August to the 14th of September. Argelander catalogues in it 76 stars, and Heis 161.

In Leo and Virgo lay the now long forgotten asterism **Fahne**, of which Ideler wrote:

> The Flag is a constellation of the heavens, one part in Leo and one part in Virgo. Has many stars. On the iron [the arrowhead of the staff] in front one, on the flag two, on every fold of the flag one.

This is illustrated in the 47th volume of *Archaeologia*, and it appeared as a distinct constellation in a 15th-century German manuscript, perhaps the original of the work of 1564 from which Ideler quoted. Brown repeats a Euphratean inscription, "The constellation of the *Yoke* like a flag floated," although he claims no connection here, and associates the Yoke with Capricorn.

> Il Petto del lione ardente.
> Dante's *Paradiso*.

α, Triple, 1.7, 8.5, and 13, flushed white and ultramarine.

Regulus was so called by Copernicus, not after the celebrated consul of the 1st Punic war, as Burritt and others have asserted, but as a diminutive of the earlier **Rex**, equivalent to the $\beta\alpha\sigma\iota\lambda\iota\sigma\kappa\circ\varsigma$ of Ptolemy. This was from the belief that it ruled the affairs of the heavens,—a belief current, till three centuries ago, from at least 3000 years before our era. Thus, as **Sharru**, the King, it marked the 15th ecliptic constellation of Babylonia; in India it was **Maghā**, the Mighty; in Sogdiana, **Magh**, the Great; in Persia,

Miyan, the Centre; among the Turanian races, **Masu**, the Hero; and in Akkadia it was associated with the 5th antediluvian King-of-the-celestial-sphere, Amil-gal-ur, Ἀμεγάλαρος. A Ninevite tablet has:

> If the star of the great lion is gloomy the heart of the people will not rejoice.

In Arabia it was **Malikiyy**, Kingly; in Greece, βασιλισκός ἀστήρ; in Rome, **Basilica Stella**; with Pliny, **Regia**; in the revival of European astronomy, **Rex**; and with Tycho, **Basiliscus.**

So, too, it was the leader of the **Four Royal Stars** of the ancient Persian monarchy, the **Four Guardians of Heaven.** Dupuis, referring to this Persian character, said that the four stars marked the cardinal points, assigning **Hastorang**, as he termed it, to the North; **Venant** to the South; **Tascheter** to the East; and **Satevis** to the West: but did not identify these titles with the individual stars. Flammarion does so, however, with Fomalhaut, Regulus, and Aldebaran for the first three respectively, so that we may consider Satevis as Antares. This same scheme appeared in India, although the authorities are not agreed as to these assignments and identifications: but, as the right ascensions are about six hours apart, they everywhere probably were used to mark the early equinoctial and solstitial colures, four great circles in the sky, or generally the four quarters of the heavens. At the time that these probably were first thought of, Regulus lay very near to the summer solstice, and so indicated the solstitial colure.

Early English astrologers made it a portent of glory, riches, and power to all born under its influence; Wyllyam Salysbury, of 1552, writing, but perhaps from Proclus:

> The Lyon's herte is called of some men, the Royall Starre, for they that are borne under it, are thought to have a royall nativitie.

And this title, the **Lion's Heart**, has been a popular one from early classical times, seen in the Καρδία λεόντος of Greece and the **Cor Leonis** of Rome, and adopted by the Arabians as **Al Ḳalb al Asad**, this degenerating into **Kalbelasit, Kalbeleced, Kalbeleceid, Kalbol asadi, Calb-elez-id, Calb-elesit, Calb-alezet**, and **Kale Alased** of various bygone lists. Al Bīrūnī called it the **Heart of the Royal Lion**, which "rises when Suhail rises in Al Ḥijāz."[1]

Bayer and others have quoted, as titles for Regulus, the strange **Tyberone** and **Tuberoni Rogia**; but these are entirely wrong, and arose from a misconception of Pliny's *Stella Regia appellata Tuberoni in pectore Leonis*,

[1] The province containing Mecca, Medina, and Jiddah, and reaching to Tehama, the low land bordering on the Red Sea.

rendered "the star called by Tubero the Royal One in the Lion's breast"; Holland's translation reading:

The cleare and bright star, called the **Star Royal**, appearing in the breast of the signe Leo, *Tubero*[1] mine author saith.

Naturally sharing the character of its constellation as the **Domicilium Solis**, in Euphratean astronomy it was **Gus-ba-ra**, the Flame, or the Red Fire, of the House of the East; in Khorasmia, **Achir**, Possessing Luminous Rays; and throughout classical days the supposed cause of the summer's heat, a reputation that it shared with the Dog-star. Horace expressed this in his *Stella vesani Leonis*.

It was of course prominent among the lunar-mansion stars, and chief in the 8th *nakshatra* that bore its name, **Maghā**, made up by all the components of the Sickle; and it marked the junction with the adjoining station Pūrva Phalgunī; the Pitares, Fathers, being the regents of the asterism, which was figured as a House. In Arabia, with γ, ζ, and η of the Sickle, it was the 8th *manzil*, **Al Jabhah**, the Forehead. In China, however, the 8th *sieu* lay in Hydra; but the astronomers of that country referred to Regulus as the **Great Star in Heen Yuen**, a constellation called after the imperial family, comprising α, γ, ε, η, λ, ζ, χ, ν, o, ρ, and others adjacent and smaller reaching into Leo Minor. Individually it was **Niau**, the Bird, and so representative of the whole quadripartite zodiacal group.

In addition to the evidence, from its nomenclature, of the ancient importance of this star is the record, although perhaps questionable, of an observation of its longitude 1985 years before the time of Ptolemy; and of a still earlier one in Babylonia, 2120 B. C., Regulus then being in longitude 92° 30′, but now over 148°. Its position, and that of Spica, observed by Hipparchos, when compared with the earlier records are said to have revealed to him the phenomenon of the precession of the equinoxes. It was then in longitude 119° 50′. Smyth wrote of it:

The longitude of Regulus has, through successive ages, been made a datum-step by the best astronomers of all nations.

This is the faintest of the so-called 1st-magnitude stars, with but $\frac{1}{13}$ of the brightness of Sirius. It has a spectrum of the Sirian type, and is approaching the earth at the rate of 5½ miles a second. Elkin has determined its parallax as 0″.089. It lies very close to the ecliptic, almost covered by the sun on the 20th of August; and, as one of the lunar stars, is much observed in navigation. It culminates on the 6th of April.

[1] This was Lucius Tubero, the intimate literary friend of Cicero.

The companion, about 3′ away, described "as if steeped in indigo," was discovered by Winlock to be itself closely double, 3″.3 apart, at a position angle of 88°.5.

β, 2.3, blue.

Denebola — sometimes **Deneb** — is the modern name for this star, abbreviated from **Al Dhanab al Asad,** the Lion's Tail, the Greek 'Αλκαία; Bayer gave it as **Denebalecid** and **Denebaleced;** Chilmead, as **Deneb Alased;** and Schickard, as **Dhanbol-asadi.** Riccioli omitted the first syllable of the original, and called the star **Nebolellesed, Nebollassid** "of the Nubian astrologers," and **Alazet** *apud Azophi,* his title for Al Sufi. Elsewhere it is **Nebulasit** and **Alesit;** the *Alfonsine Tables* have **Denebalezeth** and the very appropriate **Dafira,** from the similar Arabic term for the tuft of coarse hair at the end of the tail in which the star lies. Proctor called it **Deneb Aleet,** and there may be other degenerated forms of the original. Kazwini cited **Al Aḳtāb al Asad,** the Viscera of the Lion, or **Al Ḳatab,** a Small Saddle: inappropriate names, Ideler said, and inferred that they should be **Al Ḳalb,** which in the course of time might have wandered here from Regulus, the genuine Ḳalb, or Heart, of the Lion.

It marked the 10th *manzil,* **Al Ṣarfah,** the Changer, *i. e.* of the weather, given by Ulug Beg as the star's individual title; and Al Bīrūnī wrote of it: "The heat turns away when it rises, and the cold turns away when it disappears." Chilmead cited **Asumpha,** which he attributed to Alfraganus; Baily called this **Serpha;** and Hyde changed it to **Mutatrix.**

With the 4th-magnitude Fl. 93, it constituted the 10th *nakshatra,* **Uttara Phalgunī,** and was the junction star with the adjacent Hasta; the regents of this and the next asterism, the Pūrva Phalgunī, being the Adityas, Āryaman and Bagha. Al Bīrūnī, however, said that Hindu astronomers pointed out to him a star in Coma Berenices as forming the lunar station with Denebola; and they claimed that the great scientific attainments of Varāha Mihira were due to his birthday having coincided with the entrance of the moon into Uttara Phalgunī.

The Chinese knew it, with four small neighboring stars, as **Woo Ti Tso,** the Seat of the Five Emperors, surrounded by twelve other groups, variously named after officers and nobles of the empire.

In Babylonian astronomy it marked the 17th ecliptic constellation, **Zibbat A.,** the Tail of the Lion, although Epping gives this with considerable doubt as to its correctness. Other Euphratean titles are said to have been **Lamash,** the Colossus; **Sa,** Blue, the Assyrian **Samu;** and **Mikid-isati,** the