the baleful source of war and discord, the birthplace of the planet Mars, and so the **House of Mars**, the **Martis Sidus** of Manilius. But this was located in the sting and tail; the claws, as  $Z\nu\gamma\delta\varsigma$ , Jugum, or the Yoke of the Balance, being devoted to Venus, because this goddess united persons under the yoke of matrimony. It was supposed to govern the region of the groin in the human body, and to reign over Judaea, Mauritania, Catalonia, Norway, West Silesia, Upper Batavia, Barbary, Morocco, Valencia, and Messina; the earlier Manilius claiming it as the tutelary sign of Carthage, Libya, Egypt, Sardinia, and other islands of the Italian coast. Brown was its assigned color, and Pliny asserted that the appearance of a comet here portended a plague of reptiles and insects, especially of locusts.

Although nominally in the zodiac, the sun actually occupies but nine days in passing through the two portions that project upwards into Ophiuchus, so far south of the ecliptic is it; indeed, except for these projections, it could not be claimed as a member of the zodiac.

Scorpio is famous as the region of the sky where have appeared many of the brilliant temporary stars, chief among them, perhaps, that of 134 B. c., the first in astronomical annals, and the occasion, Pliny said, of the catalogue of Hipparchos, about 125 B. c. The Chinese She Ke confirmed this appearance by its record of "the strange star" in June of that year, in the sieu Fang, marked by  $\beta$ ,  $\delta$ ,  $\pi$ ,  $\rho$ , and others in Scorpio. Serviss thinks it conceivable that the strange outbursts of these novae in and near Scorpio may have had some effect in causing this constellation to be regarded by the ancients as malign in its influence. But this character may, with at least equal probability, have come from the fiery color of its lucida, as well as from the history of the constellation in connection with Orion, and the poisonous attributes of its earthly namesake.

In southern latitudes Scorpio is magnificently seen in its entirety,—nearly 45°,—Gould cataloguing in it 184 naked-eye stars.

Along its northern border, perhaps in Ophiuchus, there was, in very early days, a constellation, the **Fox**, taken from the Egyptian sphere of Petosiris, but we know nothing as to its details.

. . . capricious Antares
Flushing and paling in the Southern arch.

Willis' The Scholar of Thebet Ben Khoret.

a, Binary, 0.7 and 7, fiery red and emerald green.

**Antares,** the well-nigh universal title for this splendid star, is transcribed from Ptolemy's  $\dot{a}\nu\tau\dot{a}\rho\eta c$  in the *Syntaxis*, and generally thought to be from

ἀντί "Aρης, "similar to," or the "rival of," Mars, in reference to its color,—the Latin *Tetrabiblos* had *Marti comparatur*; or, in the Homeric signification of the words, the "equivalent of Mars," either from the color-resemblance of the star to the latter, or because the astrologers considered the Scorpion the **House** of that planet and that god its guardian. Thus it naturally followed the character of its constellation,—perhaps originated it,—and was always associated with eminence and activity in mankind.

Grotius, however, said that the word signifies a Bat, which, as **Vespertilio**, Sophocles perhaps called it; but Bayer erroneously quoted from Hesychios  $^*A\nu\tau a\rho\tau\eta\varsigma$ , a Rebel, and **Tyrannus**. Caesius appropriately styled the constellation **Insidiata**, the Lurking One.

Others say that it was **Antar's Star,**—but they forget Ptolemy,—the celebrated Antar or Antarah who, just previous to the time of Muḥammād, was the mulatto warrior-hero of one of the *Golden Mu'allakāt*.<sup>1</sup>

Our word, however, is sometimes written **Antar**, which Beigel said is the Arabic equivalent of "Shone"; but the Latin translator of the 1515 Almagest connected it with Natar, Rapine, and so possibly explaining the generally unintelligible expression tendit ad rapinam applied to Antares in that work and in the Alfonsine Tables of 1521; or the expression here may refer to the character of "Appc, the god of war. The Rudolphine Tables designated it as rutilans, Pliny's word for "glowing redly."

The Arabians' Kalb al 'Akrab, the Scorpion's Heart, which probably preceded the Καρδία Σκορπίου and Cor Scorpii of Greece and Rome respectively, became, in early English and Continental lists, Kelbalacrab, Calbalacrab, Calbolacrabi, Calbalatrab, and Cabalatrab; Riccioli having the unique Alcantub, although he generally wrote Kalb Aakrab. Antares alone constituted the 16th manzil, Al Kalb, the Heart, one of the fortunate stations; but the Chinese included  $\sigma$  and  $\tau$ , on either side, for their sieu, the synonymous Sin, anciently Sam,  $\sigma$  being the determinant; although Brown says that this Heart refers to that of Tsing Lung, the Azure Dragon, one of the four great divisions of their zodiac. They also have a record of a comet 531 B. C., "to the left of Ta Shin," which last Williams identified with Antares; while, as the Fire Star, Who Sing, it seems to have been invoked in worship centuries before our era for protection against fire. With some adjacent it was one of the Ming t'ang, or Emperor's Council-hall; his sons and courtiers, other stars, standing close by, to whom Antares, as Ta Who, announced the principles of his government.

<sup>&</sup>lt;sup>1</sup>These were the famous seven selected poems of Arabia, said to have been inscribed in letters of gold on silk, or Egyptian linen, and suspended, as their title signifies, in the Ka'bah at Mecca.

The Hindus used a,  $\sigma$ , and  $\tau$  for their nakshatra Jyesthā, Oldest, also known as **Rohinī**, Ruddy, from the color of Antares,—Indra, the sky-goddess, being regent of the asterism that was figured as a pendent **Ear Jewel**.

It was one of the four Royal Stars of Persia, 3000 B. C., and probably the Guardian of the Heavens that Dupuis mentioned as **Satevis**; but, as their lunar asterism, it was **Gel**, the Red; the Sogdians changing this to **Maghan sadwis**, the Great One saffron-colored. The Khorasmians called it **Dharind**, the Seizer; and the Copts, **Kharthian**, the Heart.

It pointed out to the Babylonians their 24th ecliptic constellation, Hurry, of uncertain meaning, itself being Urbat according to an astrolabe discovered in the palace of Sennacherib and interpreted by the late George Smith; Brown, however, assigns this title to stars in Lupus. Other Euphratean names were Bilu-sha-ziri, the Lord of the Seed; Kak-shisa, the Creator of Prosperity, according to Jensen, although this is generally ascribed to Sirius; and, in the lunar zodiac, Dar Lugal, the King, identified with the god of lightning, Lugal Tudda, the Lusty King. Naturally the inscriptions make much of it in connection with the planet Mars, their Ul Suru, showing that its Arean association evidently had very early origin; and from them we read Masu (?) Sar, the Hero and the King, and Kakkab Bir, the Vermilion Star. Brown identifies it with the seventh antediluvian king, Ένεδωρανχος, or Udda-an-χu, the Day-heaven-bird.

From his Assyrian researches Cheyne translates the 36th verse from the 38th chapter of the Book of Job:

Who hath put wisdom into the Lance-star? Or given understanding to the Bow-star?

Jensen referring this Lance-star to Antares. Hommel, however, identifies it with Procyon of Canis Minor.

In Egyptian astronomy it represented the goddess **Selkit, Selk-t,** or **Serk-t,** heralding the sunrise through her temples at the autumnal equinox about 3700–3500 B. C., and was the symbol of **Isis** in the pyramid ceremonials. Renoul included it with Arcturus in the immense figure **Menat.** 

Penrose mentions the following early Grecian temples as oriented towards the rising or setting of Antares at the vernal equinox: the Heraeum at Argos, in the year 1760, perhaps the oldest temple in the cradle of Greek civilization; the first Erechtheum at Athens, 1070; one at Corinth, 770; an early temple to Apollo at Delphi, rebuilt with this orientation in 630; and one of the same date to Zeus at Aegina; — all of these before our era.

It rises at sunset on the 1st of June, culminating on the 11th of July, and is one of the so-called lunar stars; and some have asserted that it was the

first star observed through the telescope in the daytime, although Smyth made this claim for Arcturus. Ptolemy lettered it as of the 2d magnitude, so that in his day it may have been inferior in brilliancy to the now very much fainter  $\beta$  Librae.

Antares belongs to Secchi's third type of suns, which Lockyer says are "in the last visible stage of cooling," and nearly extinct as self-luminous bodies; although this is a theory by no means universally accepted.

The companion is 3".5 away, and suspected of revolution around its principal; their present position angle is 270°.

A photograph by Barnard in 1895 first showed the vast and intricate **Cloud Nebula** stretching to a great distance around Antares and the star  $\sigma$ . It was here, two or three degrees north of Antares, that was discovered, on the 9th of June, Coddington's comet, c of 1898, the third comet made known by the camera.

 $\beta$ , Triple, 2, 10, and 4, pale white, —, and lilac.

Graffias generally is said to be of unknown derivation; but since  $\Gamma\rho a\psi a i o_{\xi}$  signifies "Crab," it may be that here lies the origin of the title, for it is well known that the ideas and words for crab and scorpion were almost interchangeable in early days, from the belief that the latter creature was generated from the former.\(^1\) It was thought by Grotius to be a "Barbarian" designation for the Claws of the double constellation; and Bayer said the same, although he used the word for  $\xi$  Scorpii in the modern northern claw. In Burritt's Atlas of 1835 it appears for  $\xi$  of the northern Scale, the ancient northern Claw; but in the edition of 1856 he applied it to our  $\beta$  Scorpii, and in both editions he has a second  $\beta$  at the base of the tail, west of  $\varepsilon$ . The Century Dictionary prints it Grassias, probably from erroneously reading the early type for the letter f.  $\beta$  is near the junction of the left claw with the body, or in the arch of the Kite bow,  $8^{\circ}$  or  $9^{\circ}$  northwest of Antares. In some modern lists it is Acrab,—Riccioli's Aakrab schemali.

It was included in the 15th manzil, Iklil al Jabhah, the Crown of the Forehead, just north of which feature it lies, taking in with this, however, the other stars to  $\delta$  and  $\pi$ ; some authorities occasionally adding  $\nu$  and  $\rho$ . This was one of the fortunate stations, and from this manzil title comes the occasional Iclil. The Hindus knew the group as their 15th nakshatra, Anurādhā, Propitious or Successful,—Mitra, the Friend, one of the Adityas, being the presiding divinity; and they figured it as a **Row** or **Ridge**, which

1 This was held even by the learned Saints Augustine and Basil of the 4th century, and confidently expressed by Saint Isidore in his Origines et Etymologiae.

