

α , 2.3, yellow.

Hamal, from the constellation title, was formerly written **Hamel**, **Hemal**, **Hamul**, and **Hammel**; Riccioli having **Ras Hammel** from **Al Rās al Hamal**, the Head of the Sheep.

Burritt's **El Nāth**, from **Al Nāṭih**, the Horn of the Butting One, is appropriate enough for this star, but in our day is given to β Tauri; still Burritt had authority for it, as Kazwini, Al Tizini, Ulug Beg, and the Arabic globes all used the word here; and Chaucer wrote, in 1374:

He knew ful wel how fer Alnath was shove ffro the heed of thilke fixe Aries above.

The title of the whole figure also is seen in **Arietis**, another designation for this star, as was often the case with many of the *lucidae* of the constellations.

In Ptolemy's and Ulug Beg's descriptions it was "over the head"; but both of these mentioned Hipparchos as having located it over the muzzle, and near to that feature it was restored by Tycho, in the forehead, as we now have it.

Renouf identified it with the head of the **Goose** supposed to be one of the early zodiacal constellations of Egypt.

Strassmaier and Epping, in their *Astronomisches aus Babylon*, say that there its stars formed the third of the twenty-eight ecliptic constellations,—**Arku-sha-rishu-ku**, literally the Back of the Head of Ku,—which had been established along that great circle millenniums before our era; and Lenormant quotes, as an individual title from cuneiform inscriptions, **Dil-kar**, the Proclaimer of the Dawn, that Jensen reads **As-kar**, and others **Dil-gan**, the Messenger of Light. George Smith inferred from the tablets that it might be the **Star of the Flocks**; while other Euphratean names have been **Lu-lim**, or **Lu-nit**, the Ram's Eye; and **Si-mal** or **Si-mul**, the Horn Star, which came down even to late astrology as the **Ram's Horn**. It also was **Anuv**, and had its constellation's titles **I-ku** and **I-ku-u**,—by abbreviation **Ku**,—the Prince, or the Leading One, the Ram that led the heavenly flock, some of its titles at a different date being applied to Capella of Auriga.

Brown associates it with Aloros, the first of the ten mythical kings of Akkad anterior to the Deluge, the duration of whose reigns proportionately coincided with the distances apart of the ten chief ecliptic stars beginning with Hamal, and he deduces from this kingly title the Assyrian **Ailuv**, and the Hebrew **Ayil**; the other stars corresponding to the other mythical kings being Alcyone, Aldebaran, Pollux, Regulus, Spica, Antares, Algedi, Deneb Algedi, and Scheat.

The interesting researches of Mr. F. C. Penrose on orientation in Greece have shown that many of its temples were pointed to the rising or setting of various prominent stars, as we have seen to be the case in Egypt; this feature in their architecture having doubtless been taken by the receptive, as well as "somewhat superstitious," Greeks from the Egyptians, many of whose structures are thought to have been so oriented six or seven millenniums before the Christian era, although our star Hamal was not among those thus observed on the Nile, for precession had not yet brought it into importance. Of the Grecian temples at least eight, at various places and of dates ranging from 1580 to 360 B. C., were oriented to this star; those of Zeus and his daughter Athene being especially thus favored, as Aries was this god's symbol in the sky.

It was perhaps this prevalence of temple orientation, in addition to their many divinities and especially δ ἄγνωστος θεός, the Unknown God, which furnished an appropriate text for Saint Paul's great sermon on the Areopagus to the "men of Athens," when, in order to prove our source of being from Him, he quoted, as in *Acts* xvii, 28, from the celebrated fifth verse of the *Phainomena*:

τοῦ γὰρ καὶ γένος ἐσμέν ¹
(For we are also his offspring).

To this work this quotation generally is ascribed, and naturally so, for the poet and apostle were fellow-countrymen from Cilicia; but the same words are found in the *Hymn to Jupiter* by Cleanthes the Stoic, 265 B. C. As Saint Paul, however, used the plural *τίνας* in his reference, "certain even of your own poets," he may have had both of these authors in mind.

Hamal lies but little north of the ecliptic, and is much used in navigation in connection with lunar observations. It culminates on the 11th of December.

Vogel finds it to be in approach to our system at the rate of about nine miles a second. Its spectrum is similar to that of the sun.

β , 2.9, pearly white.

Sharatan and **Sheratan** are from **Al Sharatāin**, the dual form of **Al Sharaṭ**, a Sign, referring to this and γ , the third star in the head, as a sign of the opening year; β having marked the vernal equinox in the days of

¹ The Christian fathers Eusebius and Clement of Alexandria made this same quotation; while frequent references to Aratos' poem appear in the writings of Saints Chrysostom and Jerome, and of Oecumenius. The heathen Manilius similarly wrote,

Stirps sua,
nostrumque parentem

to prove the immortality of the soul.