completing the resemblance to the object for which the asterism was named; *ι* was the junction star with Anuradha.

These same stars marked the *sieu* **Ti,** Bottom, anciently **Dsi,** and still earlier **I shi,** some Chinese authorities adding *δ*, *μ*, and *ν*.

The two *alphas* were the determinants of the 21st Babylonian ecliptic constellation **Nūru-sha-Shūtu,** the Southern Light; and some have included *β* and *γ* with them in the Euphratean **Entena-mas-luv,** the Star of the Tail-tip, as though they marked that part of the enormous, but undetermined, ancient **Hydra** of Chaldaeà, the very early **Afr** of Arabia. Oppert considers them the **Idχu** that others apply to the star Altair.

They lie 10° southwest of *β*, close to the ecliptic and almost covered by the sun on the 5th of November, the components 230″ apart; but Bayer's map and text illustrate and mention only one star. They culminate on the 17th of June.

β, 2.7, pale emerald.

Zubeneschamali, sometimes **Zuben el Chamali,** is from **Al Zubān al Shamāliyyah,** the equivalent of Χηλή *βόρειος*, the Northern Claw; **Kiffa borealis** is Arabic and Latin for the Northern Scale Tray; Bayer's **Lanx septentrionalis** signifies the same thing; and **Vazneschemali,** the Southern Weight, was used by Riccioli. So that *β*, as well as *α*, seems always to have borne the name of that half of the constellation figure which it marked.

Miss Bouvier's and Burritt's **Zubenelgemabi** is entirely wrong, both in orthography and in application to this star.

Epping says that it marked the 22d ecliptic constellation of Babylonia, **Nuru sha-Iltānu,** the Northern Light; while Jensen assigns it and *α* to that country's lunar asterism **Zibanitu,** connecting this word with the similar Arabic Zubānā; but this is not generally accepted. Brown considers that, under the name of the **Sugi Stars,** they were associated with **Bilat,** the Lady, or **Beltis;** and that the Persians knew them as **Çrob,** the Horned; the Sogdians, as **Ghanwand,** the Claw-possessing, equivalent to the Khorasmian **Ighnuna,** and the Coptic **Pritithi,** the Two Claws,—all these being lunar stations. According to Ptolemy, an observation was made at Babylon on the 17th of January, 272 B. C.,—in the 476th year of Nabonassar, or Nabu-nazir,—of the very near approach of Mars[1] to *β*, one of the earliest records that we have of this planet. Hind, however, mentioned this approach as in connection with *β* of Scorpio.

1 The Greeks knew it as Ἄρης and as Πυρόεις, the Fiery One; the Latins, as **Hercules,** in addition to its present title.

Professor Young states the opinion that β Librae formerly was brighter than Antares, now more than a full magnitude higher, for Eratosthenes distinctly called β "the brightest of all" in the combined Scorpion and Claws; and Ptolemy, 350 years later, gave to it and Antares the same brilliancy. Yet Antares may be the one that has increased.

The color is very unusual, perhaps unique, in conspicuous stars, for Webb says that in the heavens "deep green, like deep blue, is unknown to the naked eye."

Its spectrum is Sirian, and the star is approaching our system at the rate of six miles a second.

The globular cluster N. G. C. 5904, 5 M., discovered by Kirch in 1702, lies in Libra, above the beam of the Balance, not far from β and toward the 5th-magnitude 5 Serpentis. Messier could not resolve this, but Sir William Herschel, with his forty-foot reflector, counted in it more than two hundred 11th- to 15th-magnitude stars, besides those unresolved in the compressed nucleus. But it is chiefly noticeable from the recent photographic discovery by Bailey, at Arequipa, of at least forty-six, perhaps sixty, variables in the cluster,—a remarkable fact paralleled, so far as yet known, only in the cluster N. G. C. 5272, 3 M., of Canes Venatici. In 1890 Parker already had discovered two variables in 5904 by visual observation.

δ, Variable, 5 to 6.2, white,

seems to have been associated with μ Virginis in the Akkadian lunar asterism **Mulu-izi,** the Man of Fire, connected with the star-god Laterak; and in the Sogdian **Fasariva** and the Khorasmian **Sara-fasariva,** both titles signifying the One next to the Leader, *i. e.* the preceding moon station, ι, κ, and λ Virginis.

It is a variable of the Algol type, discovered by Schmidt in 1859, with a period of nearly two days and eight hours, the light oscillation occupying twelve hours.

η, 5.5,

lies between the Northern Scale and the northern arm of Scorpio.

Burritt called it **Zubenhakrabi,** a title properly belonging to γ Scorpii. His errors, however, as to the nomenclature of these stars in Libra have caused much confusion in our popular lists, sometimes none too clear at their best; yet the *Standard Dictionary* seems to have adopted all his titles, even to **Zubenelgubi** for γ Librae, which really is unnamed, as this word is merely a degenerate form of the name for the star α.