Professor Young states the opinion that  $\beta$  Librae formerly was brighter than Antares, now more than a full magnitude higher, for Eratosthenes distinctly called  $\beta$  "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.

## 8. Variable, 5 to 6.2, white,

seems to have been associated with  $\mu$  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,  $\iota$ ,  $\kappa$ , and  $\lambda$  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.

## $\eta$ , 5.5,

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

Burritt called it **Zubenhakrabi**, a title properly belonging to  $\gamma$  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  $\gamma$  Librae, which really is unnamed, as this word is merely a degenerate form of the name for the star a.

The Chinese asterism **Se Han**, named for a district of that country, lay around  $\eta$ , and included it with  $\varepsilon$ ,  $\zeta$ ,  $\theta$ ,  $\xi$ , and  $\epsilon$ .

 $\kappa$  and  $\lambda$ , 5th-magnitude stars, bore the pretentious title **Jih**, the Sun.

 $\xi$  erroneously was called **Grafflas** in Burritt's *Atlas* of 1835, but this title belongs to  $\beta$  Scorpii.

 $\sigma$  is the letter attached by Gould to the disputed  $\gamma$  Scorpii, as is more particularly noted at that star.

. . . another form

That men of other days have called the beast.

Poste's d rates.

## Lupus, the Wolf.

is the **Loup** of the French, **Lupo** with the Italians, and **Wolff** in Germany, an idea for the figure said to be from the astrologers' erroneous translation of **Al Fahd**, the Arabian title for this constellation, their Leopard, or Panther; although Suidas, the Greek lexicographer of 970, is reported to have called it  $K\nu\eta\kappa ia\varsigma$ , a word for the wolf found in the fables of Babrias of the century before our era. The Greeks and Romans did not specially designate these stars, and thought of them merely as a Wild Animal, the  $\Theta\eta\nu\hat{\iota}o\nu$  of Aratos, Hipparchos, and Ptolemy; the **Bestia** of Vitruvius; **Fera** of Germanicus; **Quadrupes vasta** of Cicero; **Hostia**, the Victim, of Hyginus; **Hostiola**, cited by Bayer; **Bestia Centauri**, by Riccioli; and **Victima Centauri**.

The Wolf reappeared as Lupus in the Alfonsine Tables, and as **Fera** Lupus in the Latin Almagests, while Grotius said that **Panthera** was Capella's name for it.

Bayer also had **Equus masculus** and **Leaena**; and La Lande, **Leo marinus**, **Deferens leonem**, **Canis ululans**, **Leopardus**, **Lupa**, **Martius**,—the wolf being sacred to Mars,—and **Lycisca**, the Hybrid of the Wolf. **Belua**, the Monster, is found in early works.

The Arabians also called it **Al Asadah**, the Lioness,—found by Scaliger repeated on a Turkish planisphere and cited by Bayer as **Asida**,—and **Al Sabu'**, the Wild Beast, Chilmead's **Al Subahh**. But the Desert astronomers seem to have mixed some of its smaller stars with a part of the Centaur as **Al Shamārīli**, the Palm Branches, and **Kadb al Karm**, the Vine Branch.

Zibu, the Beast, of Euphratean cylinders, may be for this constellation; and Urbat, the Beast of Death, or the Star of the Dead Fathers, is a title for it attributed to the Akkadians.

Caesius said that in Persia it was Bridemif, but Hyde, commenting on