

man, the star Betelgeuze, chasing the Peixie Boi, a dark spot in the sky near Orion.

In astrology it was the natal star of all destined to great civil or military honors, and rendered all women born under its influence lucky and loquacious; or, as old Thomas Hood said, "women born under this constellation shall have mighty tongues."

Its spectrum is Sirian in character, and indicates that it is receding from our system at the rate of about $5\frac{3}{4}$ miles a second.

♂, Double and slightly variable, 2.4 and 6.8, brilliant white and pale violet.

Mintaka, from **Al Mintakah**, the Belt, is the first star seen in that portion of the rising constellation. Burritt has it **Mintika**.

Astrologers considered it of importance as portending good fortune.

It is about 23' of arc south of the celestial equator, the components 53" apart, at a position angle of 0°. The spectrum is Sirian, and the star seems to have very little motion either of approach or recession.

Burnham has discovered still another companion of the 13th to 14th magnitudes, one of the faintest ever seen near a brilliant star.

ε, 1.8, bright white.

Alnilam, **Anilam**, **Ainilam**, and **Alnihan** are from **Al Niṭhām**, or **Al Naṭhm**, the String of Pearls, or, as Recorde said, the Bullions set in the middle of Orion's Belt.

It portended fleeting public honors to those born under its influence.

The spectrum is Sirian, and the star recedes from us at the rate of about $16\frac{1}{2}$ miles a second.

It is the central one of the Belt, culminating on the 25th of January.

ζ, Triple, 2.5, 6.5, and 9, topaz yellow, light purple, and gray.

Alnitak, or **Alnitah**, for this, the lowest star in the Belt, is from **Al Niṭāk**, the Girdle.

The spectrum is Sirian, and the star recedes from us about nine miles a second.

One of its components, 2".4 distant from the largest, at a position angle of 155°, was singularly missed by Sir William Herschel, but discovered by Kunowski in 1819, and seems of some nondescript hue about which ob-

servers do not agree. The elder Struve called it, in one specially manufactured word, *olivaceasubrubicunda*, "slightly reddish olive."

Orion's studded belt.

Scott's Lay of the Last Minstrel.

These Arabian titles of δ , ϵ , and ζ , although now applied to them individually, were at first indiscriminately used for the three together; but they had other names also,—**Al Nijād**, the Belt; **Al Nasak**, the Line; **Al Alkāt**, the Golden Grains, Nuts, or Spangles; and **Fakār al Jauzah**, the Vertebrae in the Jauzah's back. Niebuhr cited the modern Arabic **Al Mizān al H-akk**, the Accurate Scale-beam, so distinguishing them from the curved line of the fainter ι , θ , ι , d , and κ , **Al Mizān al Baṭil**, the False Scale-beam. The Chinese similarly knew them as a Weighing-beam, with the stars of the sword as a weight at one end.

They were the **Jugula** and **Jugulae** of Plautus, Varro, and others in Roman literature; the **Baltus**, or Belt, and the **Vagina**, or Scabbard, of Germanicus. The **Zona** of Ovid may have been taken from the *Ζώνη* of Aristotle.

The early Hindus called them **Iṣus Trikāṇḍā**, the Three-jointed Arrow; but the later transferred to it the *nakshatra* title, **Mrigaśiras**.

The Sogdian **Rashnawand** and the Khorasmian **Khawiya** have significations akin to our word "Rectitude," which this straight line of stars personified. The Rabbi Isaac Israel said that it was the **Mazzārōth**, **Mazzālōth**, or **Marlātha** that most of his nation applied to the zodiac.

Riccioli cited **Baculus Jacobi**, which became in popular English speech **Jacob's Rod** or **Staff**,—the German **Jakob Stab**,—from the tradition given by Eusebius that Israel was an astrologer, as, indeed, he doubtless was; and some had it **Peter's Staff**. Similarly, it was the Norse **Fiskikallar**, or Staff; the Scandinavian **Frigge Rok**, Frigg's, or Freya's, Distaff,—in West Gothland **Frigge Rakken**,—and **Maria Rok**, Mary's Distaff; in Schleswig, **Peri-pik**. In Lapland it was altered to **Kalevan Miekka**, Kaleva's Sword, or still more changed to **Niallar**, a Tavern; while the Greenlanders had a very different figure here,—**Siktut**, the Seal-hunters, bewildered when lost at sea, and transferred together to the sky.

The native Australians knew the stars as **Young Men** dancing a *corroboree*, the Pleiades being the Maidens playing for them; and the Poignave Indians of the Orinoco, according to Von Humboldt, as **Fuebot**, a word that he said resembled the Phœnician.

The University of Leipsic, in 1807, gave to the Belt and the stars in the Sword the new title **Napoleon**, which a retaliating Englishman offset by **Nelson**; but neither of these has been recognized on star-maps or -globes.

Seamen have called it the **Golden Yard-arm**; tradesmen, the **L**, or **Ell**, the **Ell and Yard**, the **Yard-stick**, and the **Yard-wand**, as occupying 3° between the outer stars,—the **Elwand** of Gavin Douglas; Catholics, **Our Lady's Wand**; and the husbandmen of France and along the Rhine, **Râteau**, the Rake. In Upper Germany it has been the **Three Mowers**; and it is often the **Magi**, the **Three Kings**, the **Three Marys**, or simply the **Three Stars**, that Tennyson had in his *Princess*,—

those three stars of the airy Giants' zone
That glitter burnished by the frosty dark.

The celestial equator now passes through the Belt, but was 12° below it 4000 years ago.

γ, Triple, 3.5, 5, and 5,

occasionally and very appropriately has been designated **Saiph**, from **Saif al Jabbār**, the Sword of the Giant; but this title included other adjacent stars in the same line of sight,—the **Ensis** of Cicero,—and all supposed to have been a separate constellation with Pliny.

Al Sufi called them **Al Alkāt**, which we have seen applied to the Belt: and Burritt, the **Ell**, because this line of stars "is once and a quarter the length of the yard."

θ¹, 4.6, pale white,

although not individually named, marks the Fish-mouth of the **Great Nebula**, N. G. C. 1976, 42 M., in the sword scabbard of the figure, with the celebrated **Trapezium** in its midst. De Quincey gave a characteristic description of it in one of his *Essays in Philosophy*.

This nebula, faintly visible to the naked eye, was not even mentioned by Galileo, and is generally thought to have been accidentally discovered by Christian Huygens in 1656, and described in his *Systema Saturnium* half a century after Galileo's adaptation of the principle of the telescope to astronomical use; but Cysatus of Lucerne had already known it in 1618. This was the first¹ object to which Sir William Herschel directed, on the 4th of March, 1774, the first serviceable telescope of his own construction after two hundred failures; and the first nebula to be successfully photographed, as it was by Professor Henry Draper, at Hastings-upon-Hudson, on the 30th of September, 1880.

¹ Similarly, too, it was the last object viewed by Sir William through his forty-foot reflector, on the 19th of January, 1811, when the great glass was laid aside forever.