

dicted on the 31st of January, 1862, by the late Alvan G. Clark,¹ at Cambridgeport, Mass., while testing the 18½-inch glass now at the Dearborn Observatory. It proved to be a yellowish star, estimated as of the 8½ magnitude, but difficult to be seen because of the brilliancy of Sirius, and then 10" away; this diminishing to 5" in 1889; and last seen and measured by Burnham at the Lick Observatory before its final disappearance in April, 1890. Its reappearance was observed from the same place in the autumn of 1896 at a distance of 3".7, with a position angle of 195°. It has a period of 51½ years, and an orbit whose diameter is between those of Uranus and Neptune; its mass being ⅓ that of Sirius and equal to that of our sun, although its light is but 1/10,000 of that of its principal. So that it may be supposed to be approaching non-luminous solidity,—one of Bessel's "dark stars."

It is remarkable that Voltaire in his *Micromegas* of 1752, an imitation of *Gulliver's Travels*, followed Dean Swift's so-called prophetic discovery of the two moons of Mars by a similar discovery of an immense satellite of Sirius, the home of his hero. Swift, however, owed his inspiration to Kepler, who more than a century previously wrote to Galileo:

I am so far from disbelieving in the existence of the four circumjovial planets, that I long for a telescope to anticipate you, if possible, in discovering two round Mars (as the proportion seems to me to require), six or eight round Saturn, and perhaps one each round Mercury and Venus.

Other stars are shown by the largest glasses in the immediate vicinity of Sirius, two additional having very recently been discovered by Barnard at the Yerkes Observatory.

β, 2.3, white.

Murzim, generally but less correctly **Mirzam**, and occasionally **Mirza**, is from **Al Murzim**,² the Announcer, often combined by the Arabs with β Canis Minoris in the plural **Al Mirzamāni**, or as **Al Mirzamā al Shī'rayain**, the two Sirian Announcers; Ideler's idea of the applicability of this title being that this star announced the immediate rising of the still brighter Sirius.

Buttmann asserted that it also was **Al Kalb**, the Dog, running in front

¹ His death occurred on the 9th of June, 1897, in the sixty-fifth year of his age, just after the completion and successful installation of the 40-inch glass in the Yerkes Observatory, the greatest of his many great lenses, and the last, excepting the 24-inch for Mr. Percival Lowell.

² Literally the Roarer, and so another of the many words in the Arabic tongue for the lion, of which that people boasted of having four hundred.

of Sirius, but this must have been from early times in the Desert. In our maps it marks the right fore foot of the Dog.

The Chinese called it **Kuen She**, the Soldiers' Market.

γ , 4.5, is Burritt's **Muliphen** that properly belongs to δ and to stars in Columba; but the *Century Atlas* has it **Mirza**.

It is **Isis** with Bayer, which Ideler confirms, but Grotius applied the title to the adjacent μ , adding, however, *nisi potius quarta sit*, thus referring to γ .

Montanari said that it entirely disappeared in 1670, and was not again observed for twenty-three years, when it reappeared to Miraldi, and since has maintained a steady lustre, although faint for its lettering.

It marks the top of the Dog's head.

δ , 2.2, light yellow,

is the modern **Wezen**, from **Al Wazn**, Weight, "as the star seems to rise with difficulty from the horizon"; but Ideler justly calls this an astonishing star-name.

It also was one of the **Muhlifa'n** particularly described under Columba.

The Chinese knew η and κ of Canis Major, with stars in Argo, as **Hoo She**, the Bow and Arrow.

Could thought δ variable. It lies near the Dog's hind quarter, and has a 7.5-magnitude companion $2' 45''$ away, readily seen with an opera-glass.

ϵ , Double, 2 and 9, pale orange and violet.

Adara, **Adhara**, **Adard**, **Udara**, and **Udra** are from **Al 'Adhārā**, the Virgins, applied to this star in connection with δ , η , and σ ; perhaps from the Arabic story of Suhail. It has also been designated **Al Zara**, with probably the same signification, although this form is erroneous.

The component stars are $7''.5$ apart, at a position angle of $160^\circ.6$.

ζ , 3, light orange.

Furud is either from **Al Furud**, the Bright Single Ones, or, perhaps by a transcriber's error, from **Al Kurūd**, the Apes, referring to the surrounding small stars with some of those of Columba; Ideler thought the latter derivation more probable. Al Sufi mentioned these as **Al Agribah**, the Ravens.

ζ marks the toe of the right hind foot.