

Bayer, with whom the word apparently first occurs, had "**Azelfage** id est **Tarcuta**." ¹

π^1 , with about twenty other stars in Cygnus, Andromeda, and Lacerta, was comprised in the early Chinese **Tang Shay**, the Dragon.

P, or Fl. 34, a 5th-magnitude, located at the base of the Swan's neck, is one of the few so-called gaseous stars having bright lines in their spectra. It was discovered by Janson, as a *nova* of the 2d magnitude, on the 18th of August, 1600; was numbered 27 in Tycho's catalogue, with the designation of *nova anni 1600 in pectore Cygni*; and Kepler thought it worthy of a monograph in 1606. Christian Huygens, the Dutch astronomer of the 17th century, called it the **Revenante of the Swan**, from its extraordinary light changes; but these now seem to have ceased.

ω^3 , Double, $5\frac{1}{2}$ and 10, pale red,

is **Ruchba** from **Al Rukbah al Dajājah**, the Hen's Knee; but the three stars ω now mark the tertiaries of the left wing.

The components of ω^3 are $56''.3$ apart, at a position angle of $86^\circ.3$; and other minute stars are in the same field.

*

. . . the Delphienus heit
Up in the aire.

King James I, in *Ane schort Poeme of Tyme*.

Delphinus, the Dolphin,

is **Dauphin** in France, **Delfino** in Italy, and **Delphin** in Germany: all from the Greek $\Deltaελφίς$ and $\Deltaελφίν$, transcribed by the Latins as **Delphis** and **Delphin**. This last continued current through the 17th century, and in our day was resumed by Proctor for his reformed list. Chaucer, in the *Hous of Fame*, had **Delphyn**, and later than he it was **Dolphyna**.

It now is one of the smallest constellations, but originally may have included the stars that Hipparchos set off to form the new Equuleus; and in all astronomical literature has borne its present title and shape, with many and varied stories attached, for its namesake was always regarded as the most remarkable of marine creatures.

¹ What is this last? It seems to have escaped comment by all of the authorities.

In Greece it also was *Ἱερός Ἰχθύς*, the Sacred Fish, the creature being of as much religious significance there as a fish afterwards became among the early Christians; and it was the sky emblem of philanthropy, not only from the classical stories connected with its prototype, but also from the latter's devotion to its young. It should be remembered that our stellar Dolphin is figured as the common cetacean, *Delphinus delphis*, of Atlantic and Mediterranean waters, not the tropical *Coryphaena* that Dorado represents.

Ovid, designating it as *clarum sidus*, personified it as **Amphitrite**, the goddess of the sea, because the dolphin induced her to become the wife of Neptune, and for this service, Manilius said, was "rais'd from Seas" to be

The Glory of the Floud and of the Stars.

From this story the constellation was known as **Persuasor Amphitrites**, as well as **Neptunus** and **Triton**.

With Cicero it appeared as **Curvus**, an adjective that appropriately has been applied to the creature's apparent form in all ages¹ down to the "bended dolphins" in Milton's picture of the Creation. Bayer's **Currus** merely is Cicero's word with a typographical error, for he explained it, *Ciceroni ob gibbum in dorso*; but he also had **Smon nautis**, and Riccioli **Smon barbaris**, which seems to be the *Simon*, Flat-nosed, of old-time mariners, quoted by Pliny for the animal.

Another favorite title was **Vector Arionis**, from the Greek fable that attributed to the dolphin the rescue of Arion on his voyage from Tarentum to Corinth — a variation of the very much earlier myth of the sun-god Baal Hamon. Hence comes Henry Kirke White's

lock'd in silence o'er Arion's star,
The slumbering night rolls on her velvet car.

In continuation of the Greek story of Arion and his Lyre appears *Μουσικόν ζώδιον*, the **Musicum signum** of the Latins; or this may come from the fact mentioned in Ovid's *Fasti* that the constellation was supposed to contain nine stars, the number of the Muses, although Ptolemy prosaically catalogued 10; Argelander, 20; and Heis, 31.

Riccioli and La Lande cited **Hermippus** for Delphinus, and **Acetes** after the pirate-pilot who protected Bacchus on his voyage to Naxos and Ariadne; while to others it represented **Apollo** returning to Crissa or piloting Castalius from Crete.

¹ Huet, in his notes on Manilius, quoted many examples of the use of this term by the Latins, and said *Perpetuum hoc Delphinum Epitheton*.

The Hindus, from whom the Greeks are said to have borrowed it,—although the reverse of this may have been the case,—knew it as **Shi-shu-māra**, or **Sim-shu-māra**, changed in later days to **Zirumara**, a Porpoise, also ascribed to Draco. And they located here the 22d *nakshatra*, **Çravishthā**, Most Favorable, also called **Dhanishthā**, Richest; the Vasus, Bright or Good Ones, being the regents of this asterism, which was figured as a Drum or Tabor; β marking the junction with Catabishaj.

Brown thinks that it may have been the Euphratean **Makhar**, although Capricorn also claimed this.

Al Birūnī, giving the Arabic title **Al Ka'ūd**, the Riding Camel, said that the early Christians—the Melkite¹ and Nestorian sects—considered it the **Cross of Jesus** transferred to the skies after his crucifixion; but in Kazwini's day the learned of Arabia called α , β , γ , and δ **Al 'Uḡūd**, the Pearls or Precious Stones adorning **Al Ṣalīb**, by which title the common people knew this Cross; the star ϵ , towards the tail, being **Al 'Amūd al Ṣalīb**, the Pillar of the Cross. But the Arabian astronomers adopted the Greek figure as their **Dulfim**, which one of their chroniclers described as “a marine animal friendly to man, attendant upon ships to save the drowning sailors.”

The *Alfonsine Tables* of 1545 said of Delphinus, *Quae habet stellas quae sapiunt naturam*, a generally puzzling expression, but common in the 1551 translation of the *Tetrabiblos*, where it signifies stars supposed to be cognizant of human births and influential over human character,—*naturam*. Ptolemy, as is shown in these *Four Books*, was a believer in the genethliacal influence of certain stars and constellations, of which this seems to have been one specially noted in that respect.

Delphinus lies east of Aquila, on the edge of the Milky Way, occupying, with the adjoining aqueous figures, the portion of the sky that Aratos called the **Water**. It culminates about the 15th of September.

Caesius placed here the **Leviathan** of the 104th *Psalms*; Novidius, the **Great Fish** that swallowed Jonah; but Julius Schiller knew some of its stars as the **Water-pots of Cana**. Popularly it now is **Job's Coffin**, although the date and name of the inventor of this title I have not been able to learn.

The Chinese called the four chief stars and ζ **Kwa Chaou**, a Gourd.

α , 4, pale yellow; β , Binary, 4 and 6, greenish and dusky.

The strange names **Sualocin** and **Rotanev** first appeared for these stars in the *Palermo Catalogue* of 1814, and long were a mystery to all, and

¹ These Melkites, or Royalists as the name indicates, were of the Greek Church, whose spiritual head now is the Czar, the royal head of Russia, and successor of the Byzantine Patriarch.

seemingly a great puzzle to Smyth, which he perhaps never solved, although he was very intimate with the staff of the Palermo Observatory. Webb, however, discovered their origin by reversing the component letters, and so reading *Nicolaus Venator*, the Latinized form of Niccolo Cacciatore, the name of the assistant and successor of Piazzzi. But Miss Rolleston, in her singular book *Mazzaroth*, considered in some quarters as of authority, wrote that they are derived, α from the

Arabic Scaloon, swift (*as the flow of water*);

and β from the

Syriac and Chaldee Rotaneb, or Rotaneu, *swiftly running (as water in the trough)*.

For no part of this scholarly (!) statement does there seem to be the least foundation. Burritt gave these titles as **Scalovin** and **Rotanen**.

α may be variable to the extent of half a magnitude in fourteen days.

β is a very close pair, $0''.68$ apart in 1897, at a position angle of 357° , with the rapid orbital period of about twenty-six years. Another companion, purple in color and of the 11th magnitude, $6''$ away, has lately been discovered by See, and so β may be ternary; while two other stars of the 10th and 13th magnitudes are about $30''$ away.

γ is a beautiful double of 4th and 5th magnitudes, $11''$ apart, with a position angle of 270° ; but, if binary, their motion is extremely slow. The components are golden and bluish green, and a fine object for small glasses.

ϵ , a 4th-magnitude, although lying near the dorsal fin of our present figure, bears the very common name **Deneb**, from **Al Dhanab al Dulfim**, the Dolphin's Tail. But in Arabia it also was **Al 'Amūd al Ṣalīb**, as marking the Pillar of the Cross. In China it was **Pae Chaou**, the Rotten Melon.

The comparative brilliancy of β , γ , δ , and ϵ has been variously estimated — a fact which the observations of Gould at Albany in 1858, and at Cordoba in 1871-74, prove to be occasioned by variability, within moderate limits, of all four.

★

Dorado, the Goldfish,

first published by Bayer among his new southern figures, is still thus known in Germany and Italy, but the French say **Dorade**; and Flammarion has **Doradus**, perhaps from confusion with its supposed genitive case. The word is from the Spanish, and refers not to our little exotic cyprinoid, but to the large *coryphaena* of the tropical seas, of changing colors at death. On the planisphere in Gore's translation of *l'Astronomie Populaire* it is strangely ren-