Yonder goes Cygnus, the Swan, flying southward,— Sign of the Cross and of Christ unto me.

This Cross is formed by a,  $\gamma$ ,  $\eta$ , and  $\beta$ , marking the upright along the Galaxy, more than  $20^{\circ}$  in length,  $\zeta$ ,  $\varepsilon$ ,  $\gamma$ , and  $\delta$  being the transverse.

These last also were an Arab asterism, **Al Fawāris**, the Riders; a and  $\kappa$  sometimes being added to the group.

The Chinese story of the Herdsman, or Shepherd, generally told for our Aquila, and of his love for the skilful Spinster, our Lyra, occasionally includes stars in Cygnus.

While interesting in many respects, it is especially so in possessing an unusual number of deeply colored stars, Birmingham writing of this:

A space of the heavens including the Milky Way, between Aquila, Lyra, and Cygnus, seems so peculiarly favored by red and orange stars that it might not inaptly be called the Red Region, or the Red Region of Cygnus.

Argelander locates 146 naked-eye members of the constellation, and Heis 197, its situation in the Galaxy accounting for this density. Of these stars Espin gives a list of one hundred that are double, triple, or multiple. The **Lace-work Nebula**, N. G. C. 6960, also lies within its borders.

We find among classical authors 'Iktívoc, Miluus, Milvus, and Mylvius, taken from the *Parapegnata*, and, even to modern days, supposed to be titles for our Cygnus, Aquila, or some unidentified sky figure; but Ideler showed that by these words reference probably was made to the Kite, the predaceous bird of passage annually appearing in spring, and not to any stellar object.

## a, 1.4, brilliant white.

Deneb is from Al Dhanab al Dajājah, the Hen's Tail, which has become Denebadigege, Denebedigege, Deneb Adige, etc.

In the Alfonsine Tables Arided appears, and is still frequently seen for this star, as Al Ridhādh and El Rided formerly were for the constellation. Referring to this last title, Caesius termed a Os rosae, the German Rosemund, although he also designated it as Uropygium, the Pope's Nose of our Thanksgiving dinner-tables.

a also, and correctly enough, is Aridif, from Al Ridf, the Hindmost; but Bayer changed it to Arrioph, and Cary to Arion.

Bayer gave Gallina as an individual title.

Mr. Royal Hill says that this and the three adjacent bright stars in the figure are known as the **Triangles**.

## Star-Names and their Meanings

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Deneb has no sensible proper motion, and hence has been considered as deserving the term, generally inappropriate, of a "fixed star"; but spectroscopic investigations made at Greenwich seemed to show motion at the rate of thirty-six miles a second toward the earth, and so only apparently stationary. Such motion, Newcomb says, would eventually carry it at some time,—probably between 100,000 and 300,000 years hence,—past our system at about  $\frac{1}{100}$  part of its present distance, making it the nearest and the brightest of the earth's neighbors. But Vogel's recent and more trustworthy measures at Potsdam give its rate as about five miles a second.

Elkin estimated its parallax in 1892 as 0".047,—practically insensible. Its spectrum is Sirian.

Photographs by Doctor Max Wolf, of Heidelberg, in June, 1891, show that it and  $\gamma$  are involved in one vastly extended nebula.

It rises in the latitude of New York City at sunset on the 12th of May. culminating on the 16th of September, and lies so far to the north that it is visible at some hour of every clear night throughout the year.

## 3, Double,—perhaps binary, 3.5 and 7, topaz yellow and sapphire blue.

Albireo, the now universal title, is in no way associated with Arabia, but apparently was first applied to the star from a misunderstanding as to the words ab ireo in the description of the constellation in the 1515 Almagest. Albireo in the Standard Dictionary undoubtedly is from a type error, as also may be Abbireo, Alberio, and Albeiro, which occasionally are used.

The Arabians designated  $\beta$  as **Al Minhar al Dajājah**, the Hen's Beak, where it is still located on our maps. Riccioli wrote this **Menkar Eldigiagich**; and also had **Hierizim**.

 $\beta$  is one of the show objects of the sky, and Miss Clerke, calling its color golden and azure, says that it presents "perhaps the most lovely effect of colour in the heavens." Being 35" apart, the components can readily be resolved by a field-glass. The system, if binary, has a very long period of revolution, as yet undetermined, the present position angle being 56°.

Close to  $\beta$  appeared a *nova* on the 20th of June, 1670, described by the Carthusian monk Anthelmus of Dijon. This disappeared after two years of varying brilliancy, but may still exist as a 10th- to 11th-magnitude variable, discovered, in the supposed location, by Hind in 1852.

In the neck of the Swan, not far from  $\beta$ , is the variable  $\chi^2$ , ranging from 4.5 to 13.5 in 406 days. Sometimes, at its maximum, it is of only the 6th magnitude.