

scholiast on Germanicus, as **Effusio aquae**; while **Effusor** and **Fusor aquae** were common titles. The modern Burritt has **Fluvius Aquarii** and **Cascade**.

The stars marking the ribs of the figure in this constellation are, in some maps, mingled with  $\epsilon$  and others in Capricorn.

Although of astronomical importance chiefly from its zodiacal position and from its richness in doubles, clusters, and nebulae, it also is interesting from the fact that one of its three stars  $\psi$  was occulted by the planet Mars on the 1st of October, 1672. This occultation was predicted by Flamsteed, and, on his suggestion, observed and verified in France and by Richer at Cayenne; and the several independently accordant results are considered reliable, although made more than two centuries ago. These have enabled our modern astronomers, especially Leverrier, accurately to ascertain the mean motion of Mars, and materially aid them in calculating the mass of the earth and our distance from the sun.

Aquarius lies between Capricornus and Pisces, the sun entering it on the 14th of February, and leaving it on the 14th of March.

Argelander catalogues here 97 naked-eye stars; Heis, 146.

La Lande, citing Firmicus and the Egyptian sphere of Petosiris,<sup>1</sup> wrote in *l'Astronomie* :

*Aquarius se lève, avec un autre constellation qu'il nomme Aquarius Minor avec la Faulx, le Loup, le Lièvre & l'Autel;*

but elsewhere I find no allusion to this **Lesser Waterman**, and the statement is incorrect as to the other constellations; indeed the **Faulx** is entirely unknown to us moderns.

$\alpha$ , 3.2, pale yellow.

**Sadalmelik** is from the Arabic **Al Sa'd al Malik**, the Lucky One of the King, sometimes given as **Al Sa'd al Mulk**, the Lucky One of the Kingdom, under which last title Kazwini and Ulug Beg combined it with  $\sigma$ . It similarly was **Sidus Faustum Regis** with the astrologers. Burritt called it **El Melik** and **Phard**, but this last seems unintelligible.

The Rucbah of the *Century Cyclopaedia* is erroneous for this star — indeed was intended for  $\alpha$  Sagittarii.

Sadalmelik lies on the right shoulder of the figure,  $10^\circ$  south of the celestial equator, and has a distant 11th-magnitude gray companion.

With  $\epsilon$  and  $\theta$  Pegasi it made up the 23d *sieu* **Goei**, or **Wei**, Steep, or Danger, anciently **Gui**; but Brown says that the word signifies Foundation.  $\alpha$  was the determinant star of this lunar station.

<sup>1</sup> Petosiris, the philosopher of Necepsos, the astronomical King of Saïs, was an almost mythical character to the Greeks; for Ptolemy termed him *ἀστρονομος*, although he is generally assigned to the period of 900–700 B.C.

Gould called it red, and of 2.7 magnitude. It culminates on the 9th of October. From between  $\alpha$  and  $\eta$  radiate the **Eta Aquarids**, the meteors visible from April 29th to May 2d.

$\beta$ , 3.1, pale yellow.

**Sadalsund** — not **Sund** nor **Saud**, as frequently written — is from **Al Sa'd al Su'ud**, liberally translated the Luckiest of the Lucky, from its rising with the sun when the winter had passed and the season of gentle, continuous rain had begun. This title also belongs to the 22d *manzil*, which included the star with  $\xi$  of Aquarius and  $\epsilon$  of Capricornus.

$\beta$  and  $\xi$  also constituted the Persian lunar station **Bunda** and the similar Coptic **Upineuti**, the Foundation; but  $\beta$  alone marked the *sieu* **Hou**, **Hin**, or **Hü**, Void, anciently **Ko**, the central one of the seven *sieu* which, taken together, were known as **Heung Wu**, the Black Warrior, in the northern quarter of the sky. It is found in Hindu lists as **Kalpeny**, of unknown signification. On the Euphrates it was **Kakkab Namma** $\chi$ , the Star of Mighty Destiny, that may have given origin to the title of the *manzil*, as well as to the astrologers' name for it — **Fortuna Fortunarum**.

Al Firuzabadi of Khorasan, editor of *Al Kāmūs*, the great Arabic dictionary of the 14th century, called some of the smaller stars below this **Al Au'a**, the plural of *Nau'*, a Star, but without explanation, and they certainly are inconspicuous.

$\gamma$ , 4.1, greenish,

on the right arm at the inner edge of the Urn, and the westernmost star in the Y, is **Sadachbia**, from **Al Sa'd al Ahbiyah**, which has been interpreted the Lucky Star of Hidden Things or Hiding-places, because when it emerged from the sun's rays all hidden worms and reptiles, buried during the preceding cold, creep out of their holes! But as this word *Ah'biyah* is merely the plural of *H'ibā'*, a Tent, a more reasonable explanation is that the star was so called from its rising in the spring twilight, when, after the winter's want and suffering, the nomads' tents were raised on the freshening pastures, and the pleasant weather set in. This idea renders Professor Whitney's "Felicity of Tents" a happy translation of the original.  $\zeta$ ,  $\eta$ , and  $\pi$  are included with  $\gamma$  under this designation by Ulug Beg —  $\zeta$ , in the centre, marking the top of the tent; Kazwini, however, considered this central star as **Al Sa'd**, and the three surrounding ones his tents.

All these stars, with  $\alpha$ , formed the 23d *manzil*, bearing the foregoing title.  $\gamma$ ,  $\zeta$ ,  $\eta$ ,  $\pi$ , and  $\tau$  were the Chinese **Fun Mo**, the Tomb.