

it was first drawn by Isaak Habrecht, of Strassburg, as the **Rhombus**, and so probably only adopted by its reputed inventor. It lies north of Hydrus and the Greater Cloud, containing thirty-four stars from 3.3 to 7th magnitudes.

It is the French **Reticule** or **Rhombe**, the German **Rhombeidische Netz**, and the Italian **Reticolo**.

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(Robur Carolinum, Charles' Oak,

the **Quercia** of Italy and the **Karlseiche** of Germany, was formally published by Halley in 1679 in commemoration of the Royal Oak of his patron, Charles II, in which the king had lain hidden for twenty-four hours after his defeat by Cromwell in the battle of Worcester, on the 3d of September, 1651. This invention secured for Halley his master's degree from Oxford, in 1678, by the king's express command. But La Caille complained that the construction of the figure, from some of the finest stars in the Ship, ruined that already incomplete constellation, "and the Oak ceases to flourish after half a century of possession," although Bode sought to restore it, and Burritt incorporated it into his maps, assigning to it twenty-five stars. Halley's 2d-magnitude α Roburis was changed to β Argūs, now in Carina.

Reeves' list of Chinese star-titles has only one entry under Robur —

Nan Chuen, the Southern Ship, θ , etc., but doubtful, incorrectly laid down.

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There is in front another Arrow cast
Without a bow; and by it flies the Bird
Nearer the north.

Brown's *Aratos*.

Sagitta, the Arrow,

the French **Flèche**, the German **Pfeil**, and the Italian **Saetta**, lies in the Milky Way, directly north of Aquila and south of Cygnus, pointing eastward; and, although ancient, is insignificant, for it has no star larger than the 4th magnitude, and none that is named.

It has occasionally been drawn as held in the Eagle's talons, for the bird was armor-bearer to Jove; but Eratosthenes described it separately, as Aratos had done, and as it now is on our maps. The common belief that the latter included it with his *Αλετός* was based, Grotius said, on an error in the version of Germanicus. And it has been regarded as the traditional weapon that slew the eagle of Jove, or the one shot by Hercules towards the adjacent Stymphalian birds, and still lying between them, whence the title **Herculea**; but Eratosthenes claimed it as the arrow with which Apollo exterminated the Cyclopes; and it sometimes was the **Arrow of Cupid**. The *Hyginus* of 1488 showed it overlying a bow; indeed, Eratosthenes called it *Τόξον*, a Bow, signifying Arrows in its plural form; Aratos mentioned it as the Feathered Arrow and the Well-shaped Dart, the *ἀλλος ὀϊστός* of our motto, "another arrow," in distinction from that of Sagittarius. Still, it has often been thought of as the latter's weapon strayed from its owner. Hipparchos and Ptolemy had plain *Ὀϊστός*.

Latin authors of classical times and since knew it as **Canna**, **Calamus**, and **Harundo**, all signifying the Reed from which the arrow-shafts were formed; and as **Missile**, **Jaculum**, and **Telum**, the Weapon, Javelin, and Dart; *Telum* descending even to Kepler's day. But *Sagitta* was its common title with all the Romans who mentioned its stars; Cicero characterizing it as *clara* and *fulgens*, which, however, it is not.

Bayer, who ascribed to it the astrological nature of Mars and Venus, picked up several strange names: **Daemon**, **Feluco**, and **Fossorium**, apparently unintelligible here; **Obelus**, one of the *σεμείαι*, or *notae*, of ancient grammarians, or, possibly, an Obelisk, which it may resemble; **Orfercalim**, cited by Riccioli and Beigel from Albumasar for the Turkish *Otyysys Kalem*, a Smooth Arrow; **Temo meridianus**, the Southern Beam; **Vectis**, a Pole; **Virga** and **Virgula jacens**, a Falling Wand. The **Missore** attributed to Cicero is erroneous, and was never used by the latter as a star-name, but for the one who shot the arrow; while the **Musator** of Aben Ezra is either a barbarism for **Missore**, or may be from the Arabic *Saṭar*, a Straight Line.

The Hebrews called it **Hēs** or **Hēts**; the Armenians and Persians. **Tigris**; and the Arabians, **Al Sahm**, all meaning an Arrow; this last, given on the Dresden globe, being turned by Chilmead into **Alsoham**, by Riccioli into **Schaham**, and by Piazzini into **Sham**.

In some of the *Alfonsine Tables* appeared **Istusc**, repeated in the *Almagest* of 1515 as **Istiusc**, both probably disfigured forms of *ὀϊστός*; and the *Alfonsine Tables* of 1521 had **Alahance**, perhaps from the Arabic **Al Ham** or **Hamsah**, the Five (Stars), its noticeable feature. The same *Almagest* also had **Albanere**, adding *est nun*, all unintelligible except from Scaliger's note:

legendum Alhance, id est Sagitta, hebraicae originis, converso Dages in Nun, ut saepe accidit in Arabismo et Syriasmo.

Schickard wrote it **Alohanzato**.

Sagitta is not noticed in the Reeves list of Chinese asterisms.

Caesius imagined it the **Arrow** shot by Joash at Elisha's command, or one of those sent by Jonathan towards David at the stone Ezel; and Julius Schiller, the **Spear**, or the **Nail, of the Crucifixion**.

Originally only 4° in length, modern astronomy has stretched the constellation to more than 10° ; Argelander assigning to it 16 naked-eye stars, and Heis 18. Eratosthenes gave it only 4.

It comes to the meridian on the 1st of September.

None of Sagitta's stars seem to have been named, but its triple ζ is an interesting system. It has long been known as double, but the larger star was discovered by the late Alvan G. Clark to be itself an extremely close double and rapid binary.

The components are of 6, 6, and 9 magnitudes; the two larger $0''.1$ apart in 1891, at a position angle of $182^\circ.8$. The smallest star is $8''.5$ distant. The colors are greenish, white, and blue.



. . . glorious in his Cretian Bow,
Centaur follows with an aiming Eye,
His Bow full drawn and ready to let fly.

Creech's *Manilius*.

Sagittarius, the Archer,

the French **Sagittaire**, the Italian **Sagittario**, and the German **Schütze**,—Bayer's **Schütz**,—next to the eastward from Scorpio, was *Τοξευτής*, the Archer, and *Πύτωρ τόξου*, the Bow-stretcher, with Aratos; *Τοξευτήρ* with other Greeks; and *Τοξοτής* with Eratosthenes, Hipparchos, Plutarch, and Ptolemy. The *Βελοκράτωρ* cited by Hyde, though not a lexicon word, probably signifies the Drawer of the Arrow.

These were translated by Lucian and the Romans into our title, although Manilius had **Sagittifer**; Avienus, **Sagittiger**; and Cicero, **Sagittipotens**, a term peculiar to him. His equivalent **Arquitenens**, the ancient form of **Arcitenens**,—reappearing with Ausonius and with Al Birūnī in Sachau's