

AMONG THE CONSTELLATIONS.

An Astral Alphabet.

V.

The Hyades, in Taurus, form a V, beginning with Alpha (Aldebaran), first magnitude, half way down, two fourth magnitudes, Theta (1), Theta (2), at the angle, a fourth magnitude, Gamma, half way up, a fourth magnitude Delta, and, at the upper end, a fourth magnitude, Epsilon. In our star map Epsilon has been displaced towards Aldebaran, thus spoiling the outline of the V. We shall have this corrected the next time we use the cut.

X.

Sirius (the dog-star) is at the vertex of two remarkable triangles, the base of the upper one forming an equilateral triangle, being a line drawn from Betelgeuse in Orion to Procyon, and the base of the lower one a line drawn from Phaet in the Dove to Naos in the Ship. These two triangles being joined at their vertices, in Sirius, present the figure of an enormous X, called by some the Egyptian X. The two lower stars of the figure (Phaet and Naos) are seldom seen above the horizon.

W

Between Taurus and the north pole star, in the milky way, is the constellation *Cassiopeia*, or the old woman in the chair. Its principal stars form a double V, one of the V's not being exactly of the same size and shape as the other.

A.

Autumnal A is a brilliant outline in the region of the sky occupied by the sun in autumn. It can easily be picked out from the following directions, this time of the year:

The vortex of the A is Beta Leonis (*Denebola*), the lowest star in the trapezium in Leo. The end of the lower leg of the A is Alpha, of Virgo, called *Spica*, a star of the first magnitude, down towards the south-east, in the evenings in April. The other leg ends in Alpha, of Bootes—that is, *Arcturus*, a magnificent first magnitude star. These three stars, *Denebola*, *Spica*, and *Arcturus*, form nearly an equilateral triangle. Produce the two last stars in the tail of the Great Bear towards the east and it will pass near enough to *Arcturus* to point it out. Produce a line from the pole star, through Mizar, the star in the middle of the Great Bear's tail, down towards the southern horizon, and it will indicate *Spica*.

The stars forming the cross-stroke of the A are as follows, going northerly, Gamma, Delta, and Epsilon, of Virgo, all of the third magnitude. Gamma Virginis is one of the most interesting double stars in the heavens. It is nearly midway between *Denebola* and *Spica*.

Astronomical Notes for May.

Mercury on the 1st will be in Aries, on the 6th in Taurus, three or four moon-breadths below the Pleiades; on the 12th above Aldebaran in the Hyades, about fifteen moon-breadths; on the 21st eight or nine moon-breadths above or north-east of Zeta Tauri; in the first week of June it will pass above or northward of Eta Geminorum, one of a pair of third magnitude stars close together. Its eastward course will then become stationary and move southward between the pair of stars and slowly proceed westward to meet the sun on the 19th (*inferior* conjunction).

Venus will be morning star, moving westward towards Alpha Arietis until the 20th, when it will be about four moon-breadths north of the star, it will then commence to retrace its course slowly.

Mars will be five or six moon-breadths below the Pleiades on the 6th; above Aldebaran in the Hyades on the 23rd about twelve moon-breadths, and about the 1st of June it will be on our star map (see April REVIEW), near where 5h. right ascension is intersected by 23° north declination. In a word Mars will be near Aldebaran during the whole month.

Jupiter is still low in Sagittarius but slowly moving west. It souths during the month from about 4 a. m. at the beginning to about 2 a. m. at the end.

Saturn is still in Cancer, and moving very slowly towards the Sickle in Leo, and from the "Praesepe" or Beehive in Cancer. During the whole month, however, it will not make the progress of three moon-breadths. Whitaker's almanac is in error when stating that Saturn can be seen in Leo during this month. It will not cross into Leo until about the 25th of June. Saturn is now in a favorable position for obtaining a good view, with an ordinary telescope, of its rings. These rings are sometimes seen edgewise, at other times they are at an inclination of twenty-seven degrees to the observer on the earth. They may now be seen at an inclination, which, though not the greatest, yet is favorable for observation.

The moon about the 1st of May will pass between the Pleiades and Hyades in Taurus. On the 7th it will pass a little over two of its own breadths above Saturn in Cancer. It will cut the handle of the Sickle in Leo between the 8th and 9th, passing midway between Regulus (or Alpha) and Eta. It will leave Leo on the 11th and enter Virgo near the equinoctial, thus describing a slanting line across our star map if its course were plotted on it. On the 17th it will, with half its own breadth above Jupiter in Sagittarius, be in conjunction with Venus in Aries on the 26th, and with Mars in Taurus on the 29th.