

their ends we call them butterflies; when they are pectinated, or when they have no knobs on their ends we call them moths.

S. I never saw any of these moths flying about.

T. Very likely. But the boy who caught our specimens may tell us why; well, Jack.

JACK. They fly only at night, and sometimes make as much fuss as a bat.

T. Linnæus named this moth *Telea Polyphemus*. We shall write this name on the label pinned below our specimens, as this is the name by which it is known by entomologists in every part of the world. Polyphemus was one of the fabled Cyclops, a huge cannibal giant living in a cave. He had only one large eye in his forehead. The Greek wise man, Ulysses, saved himself and several of his companions from this monster by putting out his single eye. Each wing of this moth has a single eye. Hence the origin of its specific name—Polyphemus.

AMONG THE CONSTELLATIONS.

No. I.

"He who would scan the figured skies,
Its brightest gems to tell,
Must first direct his mind's eye north,
And learn the Bear's stars well.

ANON.

So, out let us rush, the first clear September night after the REVIEW comes to hand, say about nine o'clock. The moon will not be up then to pale the glories of the sparkling sky jewels. And the Great Bear, *Ursa Major*, will be crouching just over the northern horizon, with her great three-star tail swinging up to the northwest. Its ethereal outline is too unsubstantial to make out at the first trial, so with the flaming sword of imagination let us slash down the sky just a little west of the north point, and we shall cut it in two, the shoulders and head to the east, the hind half to the west. This hind half—the tail and half of the body—includes quite neatly that group of stars called the Dipper. Four stars mark the outline of the Dipper, and three stars extending to the west make its handle, which is also the tail of the bear. These seven stars have been known under various names, such, for instance, as Charles's Wain, the Plough, David's Car. The quadrilateral of four stars form the body of a plough, or the four wheels of the wain or car, while the three stars form the handle of the plough or the single shaft or pole of the wagon or car. One pious writer, Kircher, sees in the four stars the bier of Lazarus, and in the three stars of the tail of the bear, Mary, Martha and Magdalene. The poet Schiller saw Peter's ship on the sea of Galilee typified in this cluster.

The two front stars in this group are called the Pointers; because if a line be drawn from the lower through the upper, and produced five or six times their distance, it will pass near a solitary star of the second magnitude called Polaris, or the North Pole Star, the height of which above the horizon is nearly exactly equal to the latitude of the place where the observation is made.

The stars of a constellation are named by astronomers after the Greek letters. But the most conspicuous stars are also known by their older Arabic names. The highest of the two pointers, Alpha, is called *Dubhe*, the lower, Beta, *Merak*. Gamma, the other bottom star of the Dipper, is *Phecda*. Delta, the top star of the body of the Dipper from which the handle starts, *Megrez*. Epsilon, the next star, *Alioth*. Zeta, the middle star of the handle, *Mizar*. Eta, the last star, *Alkaid* or *Benet-nasch*.

Mizar is a splendid double star, the companion being a bluish telescopic star of the eighth magnitude. *Alcor*, of the fifth magnitude, is a short distance from Mizar when seen through a telescope, and may be seen with the naked eye extremely close to it, the two appearing as a double star. Six of the stars of the Dipper are classed as of the second magnitude. Delta (*Megrez*) being of the third.

About eleven o'clock, middle of September, the two pointers will be nearly vertical over the exact northern point of the horizon, and, of course, directly under the North Pole star.

"Take the glass,
And search the skies. The opening skies pour down
Upon your gaze thick showers of sparkling fire;
Stars crowded, thronged, in regions so remote,
That their swift beams—the swiftest things that be—
Have travelled centuries on their flight to earth.
Earth, Sun, and nearer constellations! What
Are ye amid this infinite extent
And multitude of God's most infinite works?"

HENRY WARE.

THE PLANETS FOR SEPTEMBER.

Venus is evening star until the 21st, then morning star.

Jupiter is evening star, and is in the constellation Virgo, a little east of the bright star Spica.

Mercury is morning star until the tenth, then evening star.

Saturn is morning star, and is in the constellation Cancer, and not far from the star Pollux, which is to the northwest, nor from Procyon which is southwest of it.

Mars is small, and about four moon breadths from Saturn Sept. 1st.

The moon passes by Mars on the 14th, by Venus on the 17th, and by Jupiter on the 20th. The other planets are not favorably situated to be seen.