

## NATURAL HISTORY.

### THE CAMELEON.

The Cameleon is a sort of lizard, about ten inches long, with a tail of nearly the same length. He is to be found principally in India, Africa, and Arabia. It has often been said that the Cameleon lived upon air, not having been seen to take any other food. The truth, however, is, that he can go a long time without food, and, when he does eat, his food is small flies and insects. He fixes his eyes upon them, and then darts his very long tongue at them, and draws them into his mouth, so that he might appear to be merely drawing in the air. It has been said, too, that this creature changes its colour to green, blue and black, or whatever it pleases. This is not true, though there are some variations in the shades of colour according to the different lights the animal is in.



## ASTRONOMY.

Astronomy is the science which treats of the heavenly bodies, their motions, periods, eclipses, magnitude, &c. In the diagram above, the orbits of the planets are represented in the order in which they move round the Sun, which is placed in the common centre of their motion. 1. Mercury; 2. Venus; 3. the Earth, with her Moon; 4. Mars; 5. Jupiter, with four moons; 6. Saturn, with seven moons.—The two planets whose orbits are within that of the earth, are termed inferior, or interior planets; and all the others, whose orbits are beyond that of the earth, are called superior, or exterior planets.

The Sun is a vast globe of light,—a million times larger than our earth; but all the planets are dark bodies, having no light except that which they receive from the Sun.

The nearest Planet to the Sun, is *Mercury*. It is 36 millions of miles distant from the Sun, round which it revolves in 88 days: its diameter, or thickness, is about 3000 miles. This planet can seldom be seen by the naked eye, because it is so near the Sun that it is lost in its overpowering brightness; but when it is visible, which is a little time before sun-rise, or after sun-set—it presents the appearance of a little silver-hued ball.

The Planet next to Mercury is *Venus*, she is sixty millions of miles distant from the Sun, round which she revolves in 225 days. She is nearly as large as our Earth. Venus is the most beautiful Star in the heavens; and sometimes shines so bright, as to give shadows to houses, trees, &c. When she appears in the West, after sun-set, she is called the Evening-Star; and when she is seen in the East, towards day-break she is called the Morning-Star.

The third planet in order from the sun is our *Earth*, accompanied by the Moon.—The earth turns round upon its axis in 24 hours, and thereby causes day and night. It goes round the Sun in a year, and by this motion we have the seasons, which are called Spring, Summer, Autumn, and Winter.—The motion of the Earth is not unlike a top, when you spin your top, it runs round in a circle, and also moves round its axis—the former resembles the Earth's yearly motion, and the latter its daily motion. The Earth is an object of such great importance to us, and so much is known respecting it, that a further description of it must be reserved for a future number.

The *Moon* is called a secondary planet, because it attends on the earth, and travels round it in the space of a month.—The diameter of the Moon is computed to be about 2,160 miles. The connection of the Moon with our Earth, her services in often affording us light in the absence of the Sun, in subdividing the year into months, regulating the ebb and flow of the sea, and the various phenomena she presents to our notice, renders her an object of much interest to the astronomer.

*Mars* occupies the orbit next to that of the earth, as appears from the figure where its name is inserted. The diameter of Mars is about 5900 miles, his distance from the sun, about 144 millions of miles, round which it revolves in about 1 year and 11 months.

At a great distance beyond Mars, revolves *Jupiter*. He is about 490 millions of miles from the sun, and revolves round him in about 12 of our years; Jupiter is the largest planet in the solar system, being above a 1000 times larger than our Earth, he has 4

moons, which move round him in certain periods.

The most remarkable planet in our system is *Saturn*, which is nearly 900 millions of miles from the sun, round which it revolves in about 30 years of our time; the diameter of this planet is about 67,000 miles, it is attended by no fewer than 7 moons to "cheer the gloom of night." The uninformed eye imagines not, when it is directed to this little speck of light, that it is looking upon one of the most stupendous of the planets, when viewed through a telescope, it appears surrounded by a bright double belt, which, at certain times, gives it a very beautiful appearance.

## COMMON THINGS.

### No. 8.—WATER.

How common, and yet how beautiful and how pure, is a drop of water! See it, as it issues from the rock to supply the spring and the stream below. See how its meanderings through the plains, and its torrents over the cliffs, add to the richness and the beauty of the landscape. Look into a factory standing by a water-fall, in which every drop is faithful to perform its part, and hear the groaning and rustling of the wheels, the clattering of shuttles, and the buz of spindles, which, under the direction of their fair attendants, are supplying myriads of fair purchasers with fabrics from the cotton-plant, the sheep, and the silk-worm.

Is any one so insensible as not to admire the splendor of the rainbow, or so ignorant as not to know that it is produced by drops of water, as they break away from the clouds which had confined them, and are making a quick visit to our earth, to renew its verdure and increase its animation? How useful is the gentle dew in its nightly visits to allay the scorching heat of a summer's sun!—And the autumn's frost, how beautifully it bedecks the trees, the shrubs, and the grass; though it strips them of their summer's verdure, and warns them that they must soon receive the buffetings of the winter's tempest. This is but water, which has given up its transparency for its beautiful whiteness, and its elegant crystals. The snow, too—what is that but the same pure drops thrown into crystals by winter's icy hand. And does not the first summer's sun return them to the same limpid drops?

Whose heart ought not to overflow with gratitude to the abundant Giver of this pure liquid, which his own hand has deposited in the deep, and diffused through the floating air, and the solid earth? Is it the farmer, whose fields, by the gentle dew, and the