

Saturn Now in Southern Sky

Astronomy

By JAMES STOKLEY

When one first begins to learn the names of the constellations, such as the Great Bear, the Crab, the Eagle, the Lion, and so on, it is hard to see any resemblance between the actual configuration and the object represented. Perhaps the ancient people who gave the names to them had more vivid imaginations than we moderns, and could see the figure of Hercules, for instance, in the "K"-shaped group of stars overhead in the evening sky.

One constellation, however, that is now in a prominent place, has some excuse for its name. It is Scorpio, the Scorpion, now low in the southern sky in the evening. The forepart of the scorpion's body is partly represented, but the curved row of stars extending to the east and curling upwards, bears a striking resemblance to the tail of the scorpion. In very ancient times, the scorpion was considered as extending much farther to the west, including what is now the constellation of Libra, the Scales. The bright red star in Scorpio is Antares, the name of which means "the rival of Mars".

This month the constellation of the Scorpion is particularly distinguished by the presence of another body which appears as a first-magnitude star. However, its steady yellowish light makes it appear different from the scintillating stars nearby and shows that it is a planet. This body is Saturn, unique among all astronomical bodies in that it is surrounded by the flat ring which was discovered

by the Dutch astronomer Huygens in 1655. Previously, Galileo had observed them, but to his inferior telescope they appeared as two companion globes, which disappeared and then came into view a few years later.

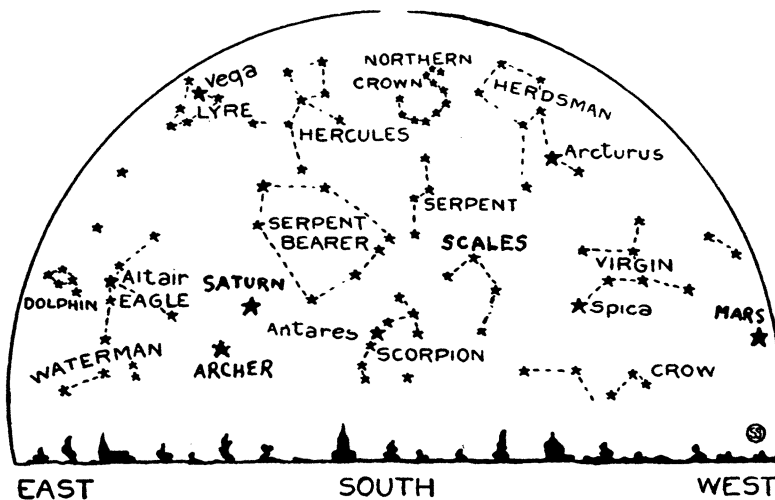
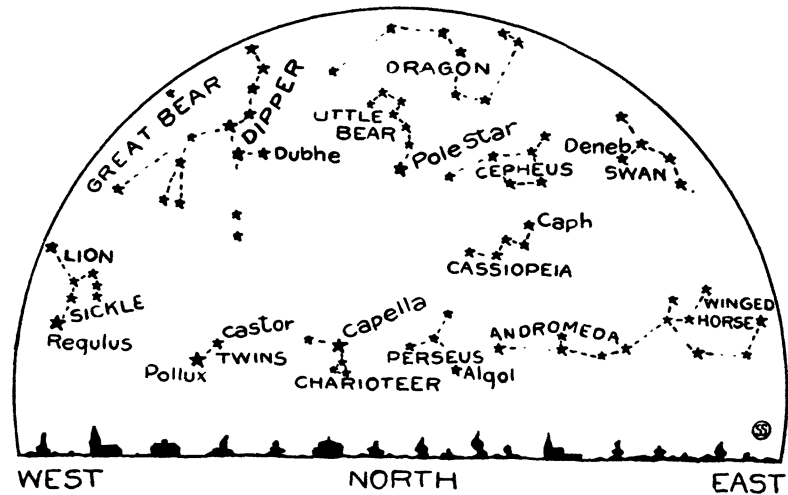
Then, in the year 1675, the French astronomer, Cassini, found that the ring was double, that is separated by a broad space now known as Cassini's division. In 1850 Professor Bond, of the Harvard College Observatory, discovered a third ring inside the other two, but much fainter, and so it is known as the dusky crepe ring. Undoubtedly this crepe ring had at that time become somewhat more prominent than it had in the past, for two weeks after Bond found it, an English astronomer named Dawes discovered it independently.

The reason for the strange disappearance of the appendages that

Galileo observed is that the plane of the rings is inclined to the plane in which Saturn moves. The planet travels around its orbit once in thirty years. Twice during this time the rings are directly in line with the earth. On such occasions, all we may see is the edges of the rings, and as they are very thin they disappear almost completely from view with even the largest telescope. Seven years later the rings present their largest area to us and so are especially prominent. The last disappearance of the rings was in 1921, so that now they are almost at full width, though they have begun to narrow. About 1935 they will disappear again.

Except for Mars, all of the other planets have disappeared from the evening sky.

The summer skies are characterized by six first magnitude stars. High overhead is Vega, in the constellation of Lyra, the Lyre; below it to the northeast is Deneb in Cygnus, the Swan. This constellation is also known as the northern cross, and Deneb is at the top of the cross. About the same height as Deneb in the northeastern sky is Altair, in Aquila, the Eagle. These three bright stars, in the same part of the sky, forming a huge triangle, make a good reference figure from which to learn the constellations. High in the western sky is Arcturus, in Bootes, the bear driver. Low in the south is Antares in Scorpio, which have already been mentioned. Spica in the southwest, in Virgo, the Virgin, completes the first magnitude stars that decorate the summer evening skies.



HOLD THESE MAPS in front of you and face North or South. The upper or lower one will then show the stars of the July evening sky

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