

DIPPERS BIG AND LITTLE

The pointers of the big dipper help you to locate the North Star, Polaris, which is the end of the handle of the little dipper. If you follow the curve of the handle of the big dipper, you will come to the bright Arcturus.

the point upwards. Just to the east of the tail, appears a group of stars sometimes likened to a tea-pot, with the spout of the pot over the scorpion's tail. On the other side of the pot is the handle, consisting of four stars, and above it is the top of the lid, marked by a fifth star. These five also form the so-called "milk dipper," the four in the quadrilateral marking the bowl, and the fifth the end of the handle. The dipper is turned down, as if emptying. Nunki is in the bottom of the bowl, nearest the handle.

As seen from Washington, D. C., at 11:33 p. m., Eastern Standard Time, May 30, the moon will pass over Nunki, and a little over an hour later, at 12:45 a. m., May 31, the star will reappear from behind the opposite edge or limb of the moon. As the moon will be only two days after full, it will be quite bright, and the star will not be as easily seen as if it were in another part of the sky. With the aid of a small telescope, or even a pair of binoculars, the occultation can be observed. It will be an interesting spectacle. It will happen a little earlier to the west of Washington, and later to the east. In the Far West, the moon will not quite cover the star.

## Disappears Abruptly

When an occultation occurs, the brightness of the star is undiminished until the instant that it disappears behind the edge of the moon; then it vanishes abruptly. Similarly, after the moon has moved on, the reappearance is sudden. This is a striking demonstration that the moon has no atmosphere, because if it had, the disappearance would be gradual, as the light of the star penetrated a greater thickness of air. The

effect is especially pronounced when the moon is near the phase of first or last quarter at the time of an occultation. Then the disappearance, or the reappearance, may be from behind the dark part of the moon. This occultation of Nunki, unfortunately, occurs with the moon nearly full.

## The Planets Pass

On May 25, the moon will pass by Jupiter, but the two will be quite far apart, about thirteen times the moon's diameter. Venus, which is now the morning star, shining brilliantly in the east before sunrise, will be passed on the ninth, but it will happen when both bodies are below the horizon. Saturn is also a morning star, but comes up several hours before Venus, about 1:00 a. m. in the middle of the month. The moon passes Saturn during the night of May 6, but here also the time of closest approach is before the two objects will have arisen in the United States.

The May evening skies bring a foretaste of summer, for low in the southeast can be seen the first part of the constellation of Scorpius, the scorpion. A little later in the night there may be seen the red star Antares in the center of Scorpius. Directly south, more brilliant than any star, is the planet Jupiter, the steady light of which shows that it is a member of the sun's family of which our own earth is part. Below it, and to the east, is the bright star Spica, in Virgo, the virgin. Almost overhead, in the north, the great dipper can be seen, with the handle pointing over to the southeast. If you follow around the curve of the handle, you will come to the brilliant Arcturus. Low in the northeast shines Vega, in Lyra, the lyre,

and still nearer the horizon is Cygnus, the swan, with Deneb, the bird's tail, over to the north.

Leo, the lion, appears high in the southwest. In the front part of his body is the sickle, with the bright Regulus at the end of the handle, and the blade curving round to the west. The blade forms the lion's head. To the east of the sickle is a triangle of stars forming the hindquarters of the lion. The easternmost one, Denebola, is in the animal's tail. Hydra, the watersnake, is below Leo, with the star Alphard, which is about as bright as Denebola.

Some of the stars of the winter sky can still be seen in the northwest. Procyon is almost directly west, marking Canis Minor, the lesser of the two dogs that accompany Orion, the mighty hunter. At the times for which the accompanying maps show the skies, 10 p. m. on May 1, 9:00 p. m. on May 15 and 8:00 p .m. on May 31, the hunter himself, and Sirius, in the greater dog, have passed below the horizon, but they can be seen in the early evening. Capella, in Auriga, the charioteer, is visible farther north, and above, to the north of Procyon, are the twins, Castor and Pollux.

Science News Letter, May 5, 1934

FLORICULTURE

## Copper Jars Found To Be Life Savers For Flowers

**T**HE LIFE span of cut flowers can be lengthened by keeping them in copper containers.

This is the discovery reported in Ithaca, New York, by John Ratsek, floriculturist on the staff of the New York State College of Agriculture.

Mr. Ratsek used in his experiments containers which are copper-plated with a recently invented electro-plating finish. He found that the copper added from one to three days to the life of roses, snapdragons, stocks, delphiniums, primroses, carnations and other popular varieties of cut flowers. In one test, poinsettias in the copper container lasted 16 days, as compared to eight days for poinsettias in a tin container.

In accounting for the copper having this effect, Mr. Ratsek explained that tests showed some of the copper from the plated containers dissolved in the water. The copper thus kept the water purer by hindering growth of bacteria and other organisms which cause flowers to decay.

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