

SYMBOLS FOR STARS IN ORDER OF BRIGHTNESS

around. Thus, it takes about 116 days for Mercury to catch up to the earth. As it does so, of course, it is almost between earth and sun and is not visible. About 63 days later it is again in line with the sun, but beyond it, also invisible.

After it has been between the earth and sun, the planet moves to the west, and when farthest in that direction, before it has started to go behind, it is said to be in "greatest western elongation." Then it is a morning star, rising before the sun. But after it has been behind, it is to the east of the sun, following that body in its daily motion across the sky, visible after sunset as an "evening star." This happens on March 16—then Mercury is at "greatest eastern elongation." Only at times of such elongations, either east or west, is the planet far enough removed from the sun's glare to be apparent.

To be seen in the evening sky, a springtime eastern elongation is best, for then the "ecliptic," the line along which the planets move, is nearly at right angles to the western horizon. Even though Mercury will be to the east of the sun again on July 13 and November 7, these will not be as favorable. Then the planet will be even farther away from the sun's direction than now, but, instead of being above the sun, it will be much more nearly to the side. Thus, Mercury will be much lower at sunset, and will set a much shorter time after the sun, while the sky is still very bright.

### Celestial Time Table for March, 1939

Friday, March 3, 5:47 p. m., Algol at minimum. Saturday, March 4, 6:00 a. m., moon nearest earth, 223,000 miles. Sunday, March 5, 1:00 p. m., full moon. Wednesday, March 8, early morning, occultation of Spica. Sunday, March 12, 4:37 p. m. moon at last quarter. Monday, March 13, 12:16 a. m., moon passes Mars. Thursday, March 16, 10:00 p. moon feathers 25:2100 miles. 16, 10:00 a. m., moon farthest, 252,100 miles; 8:00 p. m., Mercury farthest east of sun-

visible as "evening star" about this date. Friday, March 17, 4:29 a. m., moon passes Venus. Saturday, March 18, 1:53 a. m. Algol at minimum. Monday, March 20, 8:49 p. m., new moon; 10:42 p. m., Algol at minimum. Tuesday, March 21, 7:29 a. m., sun rosses equator—spring commences. Wednesday, March 22, 12:17 p. m., moon passes Saturn. Thursday, March 23, 7:31 p. m., Algol at minimum. Sunday, March 26, 4:21 p. m., Algol at minimum. Tuesday, March 28, 7:16 a. m., moon at first quarter. All times are in E. S. T.

Science News Letter, February 25, 1939

#### STATISTICS

# **Death Certificates Could** Give Better Birth Data

EATH certificates of married women, if changed in one small particular, to show number of children they have had, could give better birth statistics than are now obtainable, suggests Prof. Raymond Pearl of the Johns Hopkins University. (Human Biology, Feb-

Prof. Pearl points out that the present dependence on birth registration for statistics on fertility in women fail in two important respects. They give no information at all about women who never have children, and they do not tell, in the case of any given birth certificate, if that is the last child the mother is ever going to bear.

However, if a space could be left on the death-certificate blank for a complete listing of all children borne by a woman thus brought to the end of all possible motherhood, the records could, after a few years, be made much more definite.

Science News Letter, February 25, 1939

## **NEW PUBLICATION**

February 15, 1939

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