Do You Know?

A *sulfate plant* is in operation at Osijek, Yugoslavia, to produce fertilizer, and also copper sulfate needed by grape growers.

Eggs from two to four weeks old make more tender angel food and sponge cakes than do fresh eggs, the University of California claims; but spoiled eggs must not be used.

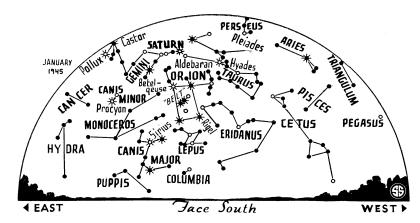
Mexican regulations require that *cars* be kept idle one day a week to conserve tires; a windshield sticker on each car shows the day it is not to be used.

The total capacity of *chick hatcheries* in the United States increased 27% in the past six years, but the total chick output increased 105%.

Two rare *metallic elements*, germanium and gallium, have been found in flue dusts from certain chemical works in England in quantities large enough to be a possible commercial source.

A pigmy forest near Fort Bragg, Calif., covering over 30 square miles of pine barrens with an acid soil, contains mature trees many of which are not over a foot high; they are cypress, and pine with miniature cones.





★ * ○ ● SYMBOLS FOR STARS IN ORDER OF BRIGHTNESS

get a glimpse of this annular eclipse.

The second eclipse of the sun comes on July 9. This one is total, and is much more conveniently placed. In fact, it will be visible partly in the United States, the first we have experienced since August, 1932, when the path of a total eclipse crossed New England. The tip of the shadow in July will fully reach the ground, first at a point just east of Boise, Idaho, just as the sun is rising there. Then it crosses Butte, Mont., where the total phase will occur quite early in the morning. It travels northeastward, across Canada, to the shore of Hudson Bay, where the total phase will last about 47 seconds. Here the sun will be fairly high, and it might be a good place for observers from the United States and Canada to go and see it. The path then goes to Greenland, where totality occurs about 11:00 a.m., and lasts about a minute and 14 seconds. This region, which used to be one of the most inaccessible in the world, is now reached daily by planes of the Air Transport Command, so it may be a place for many observers. From Greenland, the path goes to Norway, Sweden, Finland and Russia. The shadow leaves the earth east of the Sea of Aral, in Siberia, just as the sun is setting there. Russian astronomers have been very active in recent years, despite the distractions of war, and they will probably be located at a number of stations along its path within their borders, even though the longest duration they will have for the total eclipse will be only slightly over a minute. Over practically all of North America and Europe, as well as parts of Asia and Africa, there will be seen a partial eclipse.

The new year also brings two eclipses of the moon. The first, a partial one, comes on June 25, and will be visible over a region generally similar to that of the partial solar eclipse in January. But the second, on the night of Dec. 18, will be

total and that will be visible throughout the United States and Canada, as well as the rest of North America and South America, so it will undoubtedly attract a lot of attention.

Celestial Time Table for January

| Jan. EWT | |
|------------------------------|-------------------------|
| 1 7:00 p. m. | Earth nearest sun, dis- |
| | tance 91,314,000 miles. |
| 4 4:21 p. m. 5 4:00 p. m. | Moon passes Jupiter. |
| 5 4:00 p. m. | Moon farthest, distance |
| | 251,320 miles. |
| 6 1:47 p. m. | Moon in last quarter. |
| 12 4:12 a. m. | Moon passes Mercury. |
| | |
| 11:00 p. m. | Mercury farthest west |
| | of sun. |
| 14 1:06 a. m. | New moon — annular |
| | eclipse of sun. |
| 17 10:02 a. m. | |
| | Moon passes Venus. |
| 1:00 p. m. | Moon nearest, distance |
| | 228,200 miles. |
| 20 7:48 p. m. | Moon in first quarter. |
| 25 1:34 p. m. | Moon passes Saturn. |
| 20 1.04 p. III. | |
| 28 2:41 a. m. | Full moon. |
| Subtract one hour | for CWT, two hours for |
| | |

MWT, and three for PWT.

Science News Letter, December 30, 1944

EDICINE

Gallbladder Colic Pain Relieved by Asthma Drug

THE EXCRUCIATING pain of an attack of gallbladder colic can be quickly relieved by a medicine already known for the relief it gives in angina pectoris and bronchial asthma, Dr. Arthur Gladstone and Dr. Louis Goodman, of the University of Vermont College of Medicine, report. (Journal, American Medical Association, Dec. 23).

The medicine is called theophylline ethylenediamine or aminophylline. It is given by slow injection into the patient's vein and has relieved patients on whom morphine had no effect. The Vermont doctors believe that its pain-relieving effect is due to its relaxing or antispasmodic action on the muscles of the biliary tract and perhaps on the gallbladder itself. It is not a cure for gallbladder disease but the Vermont scientists believe its pain-relieving potentialities in gallbladder colic have been overlooked.

Science News Letter, December 30, 1944