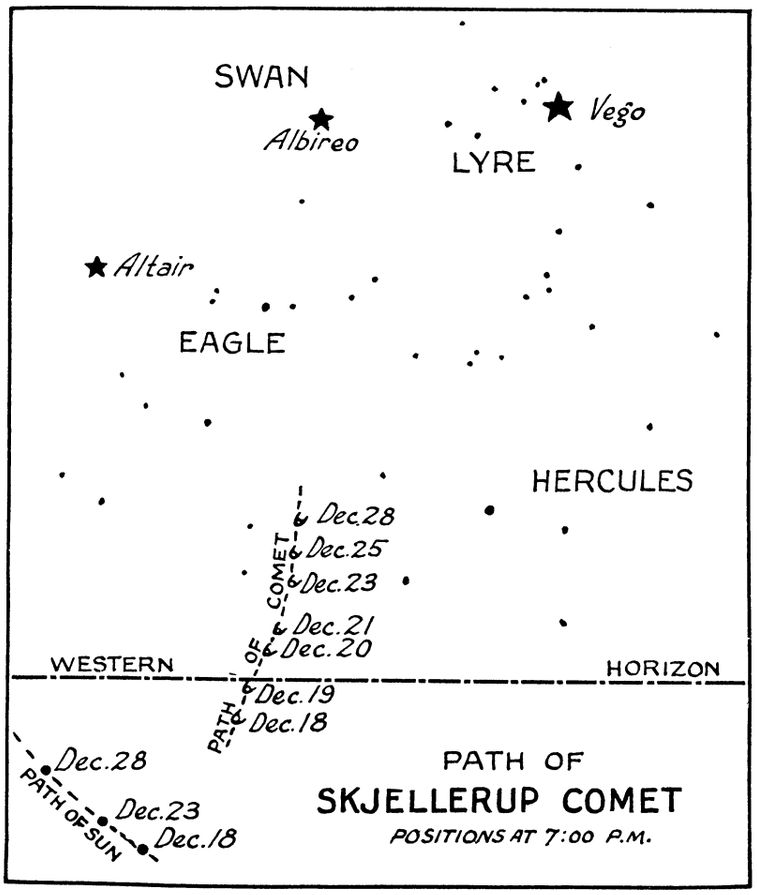
ASTRONOMY

New Comet Seen by Astronomers



Though later calculations of the path of the new Skjellerup comet have revealed that it is behind the schedule first set for it, several American observers have seen it. Following the first observations by daylight from the Lowell Observatory at Flagstaff, Arizona, it was seen from the Students' Observatory of the University of California, the U. S. Naval Observatory at Washington, and the Yeskes Observatory of the University of Chicago.

On the basis of the latest observations, Leland E. Cunningham of the Harvard College Observatory at Cambridge, Mass., has computed a new ephemeris, as the astronomer calls the comet's time-table, from which the above map is drawn. It is continuing to move in a northerly direction towards the bright star Vega, in the constellation of Lyra, the Lyre, which shines brilliantly low in the northeast now in the early evening. As the comet is still fairly bright, it should be visible for several weeks in the western evening sky after sunset, as a faint patch of light.

The suggestion has been made by A. C. Crommelin, of the British Royal Observatory, that the Skjellerup comet may be the same as De-Vico's comet, which came near the earth in 1846, being number four of that year. He made this suggestion just after the discovery of the new visitor, stating that if this were the case the date of perihelion, when it came nearest the sun, would be December 15. It has turned out very close to this—December 18.

An attempt to observe the comet by the naked eye in daylight from an airplane was unsuccessful when James Stokley, astronomer on the staff of Science Service, made a flight in an Army airplane on Saturday, December 17. Because of the haze near the ground, which obscured the comet, it was thought that an airplane would be able to surmount the haze. An altitude of ten thousand feet was attained. This was higher than the low haze, but a much higher layer still made so much glare near the sun that the comet could not be observed. The flight was made in a Curtis O1 observation plane from Bolling Field, Washington, with Lieut. F. O. Dice as pilot.

Science News-Letter, December 24, 1927

PLANT PHYSIOLOGY

Leaves Uneven Workers

Leaves have long since been convicted of being inefficient workers, utilizing only one or two per cent. of the total sunlight energy they receive. Now they are shown to be very temperamental and uneven in their use of even that pittance, by two Russian plant physiologists, Dr. N. A. Maximow and Dr. T. A. Krasnosselsky-Maximow.

In their experiment leaves of different plants, such as barley, soy beans, buckwheat and millet, were put into flat glass containers without being detached from their parent plants. Air was sucked through the containers, and analyzed as it entered and as it left, to determine how much of the useful carbon dioxid the leaves were extracting from it to manufacture into food. The apparatus was so arranged that determinations could be made in a continuous series making possible a close check on the work of the leaves.

The experiments showed that the intensity of carbon dioxid assimilation, even in such short intervals of time as twenty or thirty minutes, never remains constant. Decreases and increases of as much as 40 per cent. in the rate of intake occurred during a single run of determinations.

The Maximows do not offer an explanation of the fluctuations in the efficiency of leaves as food-making machines. They are sure that the changes are not due to outside causes, but have not yet determined what the internal factors may be. They conjecture, however, that it may be connected with a rhythmic opening and closing of the stomata, or breathing-pores, of the leaves.

Science News-Letter, December 24, 1927

ANATOMY

Lenin Had Genius Brain

The brain of Nikolai Lenin, examined by request of the Soviet government, shows marked characteristics of genius, Prof. Oscar Vogt, director of the Kaiser Wilhelm Institute for Brain Research, has announced.

Professor Vogt found in the Russian leader's brain evidence to support the theory that certain parts of the brain govern certain specific mental functions. This theory has lately been attacked by experiments performed on apes, indicating that if one area of the gray matter is destroyed another may take up its work. Two hundred fields of localization were found in the brain of Lenin.

Science News-Letter, December 24, 1927