

New Comet Brightest on June 1

Astronomy

May Be Faintly Visible to The Naked Eye

THE new comet recently discovered by the German observers Schwassmann and Wachmann may become visible to the naked eye on June 1, and will certainly be discernible with the aid of a small telescope or a pair of good field glasses. The last few nights of May and the first few nights of June will be great times for the army of amateur telescope fans, who make and use their own reflecting telescopes. With instruments of this type, the new comet can easily be seen, if one knows where to find it.

The orbit of the new comet has been calculated by F. L. Whipple and Phyllis Hayford of the Students' Observatory of the University of California, under the direction of Prof. R. T. Crawford. Their preliminary results indicate that the comet will reach its maximum brightness on June 1 when it will be only eight million miles away from the earth.

The comet will be between sixth and seventh magnitude in brightness on the night of June 1. For most persons with ordinarily good eyes, sixth magnitude stars are the faintest that can be seen; so that the celestial visitor may just barely cross the borderline into naked-eye visibility. It is a small comet, without any tail, which accounts for the minor show it is putting up in spite of its close approach to the earth.

At that, however, it is the nearest thing we have had to a visible comet for many years. Although the solar system is visited by anywhere from two or three to a dozen comets each year, most of them are too small or stay too far away to be seen except with the big telescopes of astronomical observatories. The last really good look the lay world has had at comets was in 1910, when two big comets,

one of them the returning Halley's comet and the other known simply as the "Comet of 1910", blazed in the sky at the same time. Both of these were huge affairs, with magnificent tails sweeping across a large fraction of the heavens. The present visitor is much less pretentious.

The astronomical position of the Schwassmann-Wachmann comet on June 1, corresponding to earthly latitude and longitude, will be approximately 21 hours right ascension and plus ten degrees declination. This is a spot a little to the southeast of the constellation of the Dolphin, a small group of bright stars that lies almost directly south of Cygnus, or the Northern Cross, well down toward the horizon. At nine in the evening the Dolphin is low in the east; it reaches its highest point in the sky about three in the morning.

If the new comet becomes visible to the naked eye it will appear simply

as a very faint star. With the aid of a telescope or strong field glasses it will be distinguishable as a somewhat fuzzy nucleus of light, contrasting with the stars, that show up as sharp little pin-pricks.

On June 13 the comet will reach perihelion, or its nearest approach to the sun. At that time it will be about ninety million miles from the sun, or approximately the distance of the earth's own orbit. After the middle of June it will rapidly recede and dwindle in size, until even the astronomers will see it no more.

Science News-Letter, May 24, 1930

Twin Trees

FOR the first time in the records of science, an evergreen tree has borne twins.

Proof that there is a possibility of two plants being produced from a single seed has just been obtained at the botanical laboratory of the University of Southern California, where Mrs. Tema Shults Clare, a teaching fellow, obtained in two instances pairs of twin seedlings sprouting from Torrey pine seeds, and one pair of similar twins from the seed of a pinyon pine.

Further examination of seeds showed that this condition is possible in at least a small percentage of pine seeds. One ambitious pinyon pine seed contained the beginnings of six little plants, four of which had developed to a point indicating that they might have grown if the seed had been planted. Mrs. Clare's work is supported by earlier researchers, who although they did not sprout twin seedlings at least observed potential twins in seeds which they dissected.

This habit of twinning from single seeds is peculiar to the gymnosperms, the great division of the seed plants to which pines and other evergreens belong. The higher seed plants, the producers of showy flowers, apparently do not have this possibility.

Botany

Science News-Letter, May 24, 1930

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