THE TRANSIT OF MERCURY OF MAY 8, 1924.

A transit of Mercury over the sun's disk will take place on May 8, 1924. This phenomenon is an astronomical event so rare, that the reader may like to know something about its meaning and its importance.

Astronomy tells us that the sun is attended by a family of eight large and many hundred small planets, that move around it at different distances. Our earth is one of the large planets and is the third in the order of distance from the sun, its mean distance being about 93 millions of miles. Only two planets, Mercury and Venus, are nearer to the Sun than we are. On account of the smaller size of its orbit and of its greater speed, it takes Mercury 88 days or less than 3 of our months to move about the sun, whereas it takes the earth 365 1/4 days or one year to make a complete revolution around the sun. As Mercury's orbit lies entirely within that of the earth and is much smaller, in making a revolution, Mercury must come directly between us and the sun, that is, be in "inferior conjunction", approaching nearest to us for the time being and turning his dark or unilluminated side toward the earth. In this condition he would be entirely invisible, unless he passed in a straight line between us and the sun and thus appeared as a perfectly round and black spot on the face of the sun. Such a passage is called a transit and will occur on May 8, 1924. You may inquire why a transit of Mercury should be a rare event, since the planet must come between us and the sun, that is, pass through inferior conjunction, every 116 days or three times a year. The answer is that Mercury generally passes north or south of the sun, the inclination of its orbit being 7° and thus escapes a transit. Only if the inferior conjunction occurs when the planet is very near its node, must the transit necessarily take place. Since the earth passes through the ascending node about November 10 and through the descending node about May 8, we can see immediately why all transits of Mercury must occur either on