

## **POLES WEARY OF STANDING STILL SO LONG**

Editor The Chronicle—Sir: In reference to B. S. Owens' and Anthony Moore's statements that the geographic poles have moved slowly since 1900. Astronomers having the proper equipment could easily tell us how much the geographic poles have moved along their hyperbolic path of deviation from mean north and south line axial projections ascertained in 1900 A. D. I feel certain many Chronicle readers would be interested to hear from a competent astronomer as to this. What do astronomers say?

Would also appreciate if astronomers would tell us about the sun's orbit, its shape, period of orbital revolution, and in what point of our galaxy is its gravitational center? As for the sun getting old, it is no older than barely past middle age, and I cannot see that the possible fact that the sun is at or near either end of its probable parabolic orbit is a reasonable cause for any upheavals on earth.

The geographic poles do wobble a few feet from time to time, but would have to deviate many miles from their accustomed point before there would be any danger. The earth's surface undulates, but that motion is a very slow, ages-long process and the positions of the geographic poles respond as gradually to crustal movements. I am not denying that minor crustal changes, as the upheaval of say 100,000 square miles, might not take place quite suddenly, but on the grand scale nature is never in a rush.

Robbins, Cal., Sept. 30, 1929. OLE J. SNEIDE.