

1966, Dec. 4

Dear Walter:

A friend of mine at Cleburne, Texas, posed two questions recently which I couldn't answer right off, nor am I at all sure I can figure out the answers at all. If you can help, I'm sure he'll be grateful:

1. Toward what point on the celestial sphere does the pole of the sun point? Has it ever changed so far as astronomers can tell?

2. Define the orbit of Saturn with respect to the sun's equator; i. e., at what angle do they intersect and where are the "nodes"?

I missed you greatly at the meeting of The Meteoritical Society in Washington. It was very intriguing as usual. For the very first time that I can recall, the council upheld a program committee's decision to reject two offered papers; I cannot say they were wrong, and indeed voted with them, as the authors and subject matter were of dubious standing, but it is just another sign that the society has turned fully professional, which indeed it has. There were even double sessions one morning. The papers are getting more technical. The material of carbonaceous chondrites is now well recognized as something actually very common and presumably pretty basic wherever meteorites come from. The Canadians don't admit it, but they pulled an awful boner in retrieving only about 1 gram of the Revelstoke fall. Ninninger told me at Odessa that they rode over the area frequently in a helicopter, obviously looking for a big hole or crater, when they should have been ground searching for tiny bits. I suppose the country was largely snow-covered (I think it was April 1, 1965) and I am thoroughly sympathetic with those who tried for a recovery.

Correspondence with the fellows in Kansas establishes clearly that they have another stone, so there are 3 Belle Plaine's; of course it is not yet proven that all are related but I shall try to send them chips. The localities are all in a straight line and it would be a wonderful place to go and search for more. I have intended to right along but you know

about intentions! Maybe next summer..... I don't know whether any of the metal detectors would work on such stones.

I pulled an awful boner on the Leonids and should ask you to kick me. I arose and watched for an hour or a bit more on the morning of the 16th, from about 4 till 5. The score was 2 meteors and three satellites.

On the 17th I got up and watched from 3.15 till 4.20 and counted 61 in an hour. It seemed a decent enough shower but I detected no signs of improvement and old age and weariness got me; I committed the unpardonable sin of the amateur in losing hope, and went to bed! We had gorgeous weather here and many people saw the "storm" from about 5.30 till after 6 but no one thought to call me (that's what comes from having a reputation of knowing all about it!) and I slept blissfully thru the shower of the century! I should have a lead medal of some sort.

Maybe I have some excuse that business is overwhelming me. It is, to some extent. Besides my regular duties and troubles I am involved in the fight to save our building and in a complex auditing change which involves changing from an accrual to an installment basis of accounting. To do that, we must sell all our retail accounts receivable at this year end (some \$3,000,000) under a form of contract that we first have to get approved by the IRSS. The whole thing is a lot of foolery that the government and the lawyers insist on and it discourages me; it will cost us about \$15,000 to do the trick, but later should save us more than that each in the interest on deferred taxes.

I'll probably be in New York as usual, tho I have not yet made definite commitments. The time, I believe, is Jan 15-21.

Sincerely,