

1970 Feb. 1

Dear Tom:

Please forgive my long period of silence; I have been fully aware with gratefulness of your continued active interest in the fall of Jan. 3.

But when the Harvard network found the meteorite, there is a sort of ethics that keeps me from going in and capitalizing on their efforts, and there is not much more I feel I should do towards trying to find additional pieces.

I ran into this way back in the 1930's. There were then very few meteorite hunters, and while commercially and legally there is no reason why outright competition should not prevail and the devil take the hindmost, it seemed better to me at that stage to sort of work with the other fellow and expect him not to interfere with me. I agreed on this specifically with the foremost meteorite hunter of the time, H. H. Nininger. I've never had any such agreement with the Smithsonian Astrophysical Observatory but know Dr. Fred Whipple, the head of it, fairly well, and have met Dr. Richard McCroskey several times--he is in charge of the Prairie network of cameras that spotted this thing.

I actually thought the big piece would be somewhat to the northeast of Tahlequah, so my arm chair survey was wrong to that extent. I did feel from the picture of the first one found that it was not the entire piece--you can tell when something has broken off one or more sides--and while I was in New York I read that a second smaller piece had been found. There may well be others, indeed several or many. Indeed there might still be a bigger piece farther along the path, which I still think came from the southwest.

I was sort of stymied on the matter anyway because I began to develop a slight cold several days before I left, with some reluctance, for my annual New York trip on Jan. 17. The trip was a flop so far as I was concerned as my cold did nothing except get worse and I finally had to hit the bed for a day and a half when fever developed.



I did manage to recoup enough to drag down to Washington one day and see some scraps of the meteorite at the Smithsonian Institution, where I know the men very well. It has been cut into a number of pieces and tests are being run at about 6 places for radioactive nuclides (induced by cosmic rays while the meteorite is out in space). As some of these have pretty short half-lives the astronomers have been anxious for some 10 years or so, since apparatus has been developed for measuring these disintegrations in a very sensitive way to get very freshly fallen specimens for the purpose.

I know of at least three cases in which they have already done this, but you know they like to repeat these experiments (just like they want to keep on going back to the moon!) to check their results, see if something different shows up, or, as they put it, get a good statistical result.

The other big purpose of the camera network is to get an orbit on the incoming object, as this has been done only once, on a fireball in Czecho-Slovakia. Harvard has been running this network some 4 or 5 years and this is the first meteorite they have retrieved!--they have numerous well worked out fireballs, and have concluded that nothing falls most of the time. I could have told them that from 20 or 30 years of fruitless experience!!! However, I still think maybe something falls and that even with all their exactitude the piece(s) are simply small or elude their search. I always sympathized with McCroskey and told him he had just had real hard luck. This time they had real good luck, and deserved it. There has been a good element of luck in every one of our recoveries.

The meteorite is the commonest type (a chondrite, which simply means it has a lot of chondrules in it, little rounded grains or spheres of minerals) and you will notice all the criteria given on my circular were met--black crust, no great penetration of pieces, etc. Harvard has used my circular almost verbatim at times (with my full permission).

I never did find Lost City on any map except the one you sent, and I hope they name the meteorite finally after a somewhat larger town nearby.

Thanks again for all your letters and clippings and I may write you again to answer some points in your prior letters. Best regards to all the McMillans.