Jan. 30, 1914.

Dr. F. S. McKay, Colorado Springs, Colorado.

Dear Doctor McKay:-

Your letter of December 28th has again passed over some time without answer, expressing the neglect which usually comes with inability to do things promptly and well.

Recently there has not been much improvement in my eyes, but my general health outside of that difficulty, has been steadily on the improvement. I am sleeping well and eating well, and generally my physical condition is excellent. In fact I am doing very little else really than that which I conceive will bring about the very best of physical conditions. I seem to be succeeding so far as my general condition is concerned, but I cannot read anything in the way of book or newspaper work. So much for that.

Now in regard to the principal subject matter in your letter. I do not know about the Panama-Pacific Dental Congress. It may be that to present the paper there would be a good thing. I find, however, that very many good papers presented to such associations are buried. If they have an arrangement by which papers presented there will be published in the prominent dental journals, aside from the publication that they make, it is all well, but I have generally felt that it is best to publish important papers in the best dental journals we can command, for instance, such as the Cosmos. They will then go to the whole dental profession, and spread the information more widely than any local association - no matter how large - can do. The benefit to be derived from the discussion might be important, but the probabilities are that it will be unimportant. This matter is too new for men to discuss it intelligently. Many men will associate it with something they have seen, that is not of the nature of the difficulty with which you are grappling.

There is one thing that seems not to have been done. I did not do it when I was out there - I don't know why - and that is, to make an examination of the teeth of animals of these neighborhoods and see whether or not there is any similar difficulty with them. That is the only thing I can now see along the line of the examinations you have made that should yet be done, that is available to do, and that need not be carried very far. The examination of a few herds of cows or a few horses which are known to have been born and developed in your region, would be sufficient. If you find nothing, that ends it; if you find something, it may be followed out to see where it comes from if possible - a very simple matter I should think. I should think if any of the animals presented it, it would be seen in the teeth of horses. Their upper front teeth are rather more exposed than any of the teeth of cows, and I should look for it in the herbivorous rather than in the carnivorous animals. This examination would render the part of the work in which you have been engaged very complete:

Another point of examination which it has struck me all the time would be really more important than the examination of the water, would be the chemical examination of the soils, and particularly of the dust in the regions of susceptibility, as compared with the same outside of those regions. Here is a field in which chemical elements in the soil become incorporated more or less with the water, but acting directly by being breathed and otherwise coming in contact with the individual, may be a constant source of disease, and have an effect upon the whole muscular apparatus and the teeth as well.

The absence of the "butter-ball" variety of children among those born and raised in your locality, is one of the enigmas to me, and besides the teeth, was one of the important features that I noted in all my observation of the children in your city when I was there. This leads me to strongly suspect that there is something somewhere about your soil, and the light, and the wind, that has an effect that is not found in the water. I think I have expressed this in some way to you before, but not quite in this form. It is not impossible that there may also be something in the vegetation, or some items of vegetation, that have this kind of influence. I understand that the cottonwood trees are being removed from your city because of supposed irritation of the pollen grains, or other elements of the flower, upon the mucous membranes of the respiratory apparatus. This has been observed in a considerable number of localities. Some form of plant life of a region is occasionally chargeable with the production of disease.

Now, doctor, these are only suggestions. Ponder them carefully and see what you think about taking up some of them for future work. I have felt from the first that something else than the study of the water would become necessary.

Now as to aid from Washington, you may get something and you may not. In the event that you do not, I am quite sure that the N. D. A. Research Fund will be available. From certain things that have passed between friends of mine and that association lately, and also some of my own correspondence with them, it would indicate that they would be very glad to find use for money that they have already on hand, but they seem to be careful about placing it where it will do good.

Please overlook my delay in answering, and let me know promptly of anything where I can be of any possible benefit to you.

Very truly yours,