July 13, 1951.

Dr. E. D. Delamater, Department of Dermatology, University of Pennsylvania, Philadelphia 4, Pa.

Dear Ed:

Thanks very much for your letter and slide. It reached here before we did: this, and the same problem of getting the lab. in order again accounts for the delay in my reply.

I have spent some time in looking at our own coli preps., as well as the megaterium slide you sent. I find no difficulty in picking out cells which support bacterial mitosis a la Belamater, and as I told you I think this is a very plausible interpretation, both on general grounds, and from the material. On the other hand, my conscience tells me that it would be extremely easy to delude oneself with this sort of material. The "centricles" do not always show up in figures whose orientation would lead you to expect them; spectimes there are extra granules not easily explained, and so on. Worst of all, however, I find it difficult to formulate criteria of preof, as against plausibility. My general conclusion is that I am glad not to be a cytologists obliged to make up my mind.

On the other hand, I think that your suggestions are going to throw some new vitality into the field, if only because of the ruckus they may stir up. More concessful, I have some fresh hope of being able to interpret the diploid-haploid comparisons in terms of chromosomal units. All of us are going to look and analyse our material a good deal more intelligently, i.e., in terms of a specific hypothesis of karyokinesis. Poulson made a suggestion worth considering: namely that there are diffuse centromeres. On this basis, the strands of staining material (Feulgen-positive) that Robinow and others properly insist upon as lingering between the separating chromatinic masses (especially in B. mycoides), might be the interzonal bodies of similar behavior in certain insects.

Can I ask you one other favor? Before committing us to the bother of a subsero setup [and if you could say how cramped we were you'd know what I mean] I should like to see the advantages of cryedehydration in material we are familiar with, namely K-12. If you would be willing to send us such a preparation on loan — and if you're feeling particularly expansive, also one of your beautiful coocus, we would appreciate it very much.

Esther and I enjoyed the pleasure of meeting both of you.