Marblehead, Mass.

July 15, 1905

Dear Prof Binns:-

I feel better. Your letter which came yesterday telling that something was wrong with the glazes has raised my spirits several degrees. I knew that something was wrong with the results I was getting but supposed of course that the fault was in the kiln or in me. I have not been able to get nearly so high a temperature as the kiln ought to reach. At the first firing I forced it as high as Miss Luther ever fired it — to what she considers as the danger point — and all I could do to the cones was to bend 08 about half way. 07 and 06 just began to tip and the rest were not affected at all. The fire looked hotter than 08 and it is possible that something was wrong with the cones. When I examined my trials after this firing I found that the blue, green, and black had fused and gave a fairly good matt surface; the red brown had fused to a bright glaze and had bubbled very badly; and the rest of the glazes were not melted at all. This was rather discouraging but I had hopes of doing something with the blue and green at least, so I put these on some small pieces and fired again. This time the glazes crawled badly in the corners and edges of the pieces and the surface was not so good as before. I was surprised too in the color of the slate glaze. On the body we have here it gave a very bright, almost crude blue and the green was not so pleasing as on the no 2 brown body.

I patched up the cracks in these pieces and fired them over but could not get (?) heat enough and the results were no better than before. By this time I think Miss Luther was about discouraged and thought I had better work with the bright glaze they have been using, so I had begun on that when I got your letter. Now I have hopes that with some glazes that are right I can do some better work. It seems to me that there must be some way of getting the kiln hotter than 08. Miss L. always fires with all drafts closed and thinks it is better that way. Of course I don't know anything about the kiln but it seems to me that combustion might be more rapid and the heat greater to increase the draft toward the end of the firing. Even with proper glazes I shall probably not be able to get good results unless I can at least reach 04.

They are very anxious to get some good pieces done as soon as possible so it will probably be better if you can send some glazes by express right away without waiting for the cans to be returned. In regard to colors – dull, soft colors are most in demand here so it will be best to send the most subdued glazes you have. If you could also send a quantity of the #420 base clay, I could work out some colors suited to the body we use and send to have them mixed. I would also like to have the formula and batch wt of #420. If you could send a jar of bright glaze for low temperature I should like to try it on some of the pieces instead of the one they are using now, which is extremely difficult to handle. The glaze they use is composed entirely of red lead and silica with no kaolin or anything to hold the particles together. Consequently it will not lie suspended in water and dusts off very easily when dry. I think we could get much better results with a properly constructed glaze.

If you can spare a few cones please send them each of the numbers up to 03.

They have a large number of pieces in the biscuit waiting to be glazed and it will probably take a month or more to get them out of the way. We shall need considerable glaze, especially greens and blues. Perhaps it would be best to send your two dullest greens, a dull blue, the red, tan, and black and the leopard or some other brown. If you can make any suggestions in regard to forcing the kiln to a higher temperature I shall be very glad of them.

I do not know whether I shall have to give any talk on glazes or not. If I do, I think that with what you told me in your letter and what I already know I can at least make them think I know something about it.

I certainly hope I can get some good results soon. This is just the season when they want pieces to sell to the summer residents and they are particularly anxious for some nice things. Trusting that the new lot of glazes will bring me better luck I am

Yours sincerely

Arthru E. Baggs