

Blommingdale Ind.

Jan 12, 1909.

Professor Chas. F. Binns
Alfred

Dear Friend;

I turned over the information you furnished me to my firm here and they desire me to convey their thanks to you.

Their clay according to the State Geologist's report analyzes as follows:

Si O₂ 69.41

Al₂O₃ 18.81

Mg O .54

Ca O .90

Fe₂O₃ 2.64

H₂O etc. 7.65

It resembles shale in structure in the bank, looks very sandy, weathers down slowly, but flakes in the clays readily. It has been used raw and pugged in horse mills, ground in wet for etc. for 45 years at old Annapolis.

but it had never been pressed till we started. The first pass took 7 hours to pump and was soft even then. On my suggestion, a couple of presses were brought out of clay weathered for two years, were left on a flat at the station from a shipment out to some outside point. These took two hours to press. By using clay that has had a freeze and thaw, one or more times, a rate of pressing at around 4 hours has been kept up.

The pump is a duplex steam one (Canton) and runs about 2 days and then new frames are required. The clay bears much mica and we think this mica drops the clothes and cuts the frames also.

An agitator is not necessary for the slip from this clay as it does not settle in 48 hours even.

I am requested to ask you if you think this clay would work better (press better) with the air system.

I know your answer already but I have one further point to bring to your notice; this being some notion of my own and not official.

I recalled our work in colloidal form of clay.

I found that this clay taken raw from the mine and thunged up and used for casting slip, was slow to set to the mold, and would not let loose when dry, the ware so made cracking into staves (if I may so state it) and I used a sponge to draw it out of the molds. Weathered clay did not behave so. I found on experimenting that by acidifying with HCl. I got the same results as by weathering.

I have the promise of the superintendent to try acidifying the slip preparatory to glazing and I confidently expect surprising results. Possibly not practicable but interesting. I desire a fair test and

I am rather hoping the air system
will ~~start~~ stalled things in running
a steady, sure, pressure.

Regards to your family.

Yours very truly
Paul E. Co.