

24 x 16, but was found to be only 20 x 16. Was that concrete set, and had the 4 inches to be added? Would it make up as strong?

Mr. Nourse,—

When I found that it was 4 inches short, there had been nothing poured. If it was set we would certainly have had to put on the other four inches, but it would not be as strong as it should be. That is one of the things about which they are very strict in this city, that it must be poured together.

Mr. Bird,—

Supposing you have a lot of cement on hand, say, for two years, does it deteriorate?

Mr. Nourse,—

The best way is to test it. As cement gets older it loses a portion of its weight. They would not use old cement in first-class work, although it could be used in inferior work. It is freaky stuff, and to test it is really the only way to discern its value.

Mr. Wickens,—

Mr. Nourse spoke of proportions of cement and mentioned 1, 3 and 5. I do not know anything about making cement for buildings, but I have had considerable to do with making cement for large engine foundations. We used what we considered the best mixture for that purpose—2, 3 and 5. Of course an engine foundation is not like building a wall. We wanted the weight which would stand the shocks of the reciprocating motion of the engine so many times a minute. It is like shooting a gun, the admission of steam at each end of the stroke must be considered as an application. If the gun is heavy enough you get no kick. We found that if the foundation was not thick enough it would crack. The firm I was with was the first company to use cement for foundation work for engines. I would like to know whether it would be possible to use 1, 3 and 5 instead of 2, 3 and 5 for engine foundation work. We make the richer mixture because we wanted the work strong as well as heavy.

Mr. Nourse,—

Yes; I know it would. The only reason that you used 2, 3 and 5 was that there was a certain tensile strength in it, but if you reinforced it with steel it would take care of it with a mixture of 1, 3 and 5.