

Mr. Wickens,—

I understand that reinforcing is for reducing the weight of the wall or amount of cement to be put in.

Mr. Nourse,—

You would get the same weight but with less cement.

Mr. Baldwin,—

Some four years ago I helped to install a battery of boilers in a concrete building down over the Don. I am speaking concerning what Mr. Nourse said about the Inspector having his troubles. The building was about 250 feet long. The contractor was an American, the foreman of the firm who had the work was a Frenchman, and the workmen were dagoes. You can imagine the troubles of that Inspector.

I rose specially to ask one question concerning the matter of expansion. I have in mind a building of reinforced concrete, which is 150 feet long, 50 feet wide, three stories high with basement, and there is a crack right through the building. I was wondering whether it was due to the building settling or from contraction and expansion.

Mr. Nourse,—

I would not like to say, but I know this much, that expansion in concrete would not be any more than in steel. I think in this case there might be something in the settling. I do not think the crack is caused by the concrete as it will not expand any further than steel. I know rails expand and you can see them, but in buildings like you mention, there is a pretty uniform temperature, and the expansion would be practically nil.

Mr. Wickens,—

Last week I had the pleasure of attending the Clay Worker's Convention, and heard all about brick and other material for building construction. I heard all about the fire resisting qualities of brick. The lecturer has told us to-night about the fire resisting qualities of cement. The brick men claim that brick is the best fire resisting material. That led me to look up data concerning fires during the last year in America. Last year in the States there were six hundred million dollars damage done to buildings by fire. The *Insurance Review* tells us there is no country under the sun that has more fire destruction than the country to the south of us.

In some of the large buildings steel structure is used to carry the weight and brick and terra cotta used to protect it from fire. Now it is a question in my mind, is it possible to build