

about, that the Grand Trunk Railway in Toronto do not leave it to their stationary engineers to make an inspection of their boilers. I examine the boilers and make out the reports, and the engineer as well as myself signs them.

Mr. Bird,—

I would like to ask Mr. Wickens whether he has any faith in boiler compounds.

Mr. Wickens,—

The base of all compounds is soda. Some people make compounds by adding maganese or using a coloring with it. A man will do just as well with a very strong soda or go a little further and get soda ash, or if you wish, get tri-sodium phosphate, which is the strongest solution. I know of cases where a few pounds of concentrated lye will break up scale in a boiler. No man can say that any one compound will suit all waters. All waters carry a certain amount of solid matter with them and in some cases often make scale which is nearly impossible to remove. As Mr. Duguid says, if you wash the boilers out often enough you will get very little scale.

While I am talking I would like to say one word about that explosion of which Mr. Bly spoke. I found the safety valve myself and it could not be moved at 7,000 pounds' pressure. The pin in it was stuck so fast that it took five blows of a chipping hammer to move it. I have visited many explosions and can always find a good reason why the boiler really exploded; however, I do not think any explosion is an accident. I have further to say that it is possible to miss something in a boiler inspection, but it is a rare case. There are many cases where boiler inspections have prevented explosions, by having the boiler repaired before it got dangerous.

Mr. Lewkowicz,—

I would like to throw a little light on the matter of feed water in boilers. I was connected with a feed water concern at one time. They used to run the feed water into a settling drum in the boiler and it proved a very efficient way of extracting a lot of soft mud or solid matter that might be in the water. Apparently the water does not need to travel very far before it will deposit the mud or scale in the boiler.

I think the engineers in Toronto should take up the matter of having proper boiler inspection. I do not mean inspection by a casualty company, but municipal inspection. I think such an inspection would be beneficial both to themselves and to the public at large.

Mr. Duguid,—

I would like to know if it is possible to take the impurities