

was the father of handling all other goods by power. But I would like very much if Mr. Archer could tell us how we could unload a belt at various places without injuring the belt, and also how much elevation to give the belt in order to carry the material over successfully.

Mr. Archer,—

The question of discharge from belt conveyors at various points has always been a difficult one. The solution to the problem has been a reversible belt tripper. The belt tripper consists of an iron frame into which pulleys on shafts are set. (Mr. Archer made a sketch on the blackboard of a reversible belt tripper.

In reference to the inclination of conveyors, there has always been a certain amount of discussion. In our practice we consider 25 degrees is the maximum. Over 25 degrees you run a certain amount of risk, we have them running as high as 32 degrees, but they are liable to give trouble.

Mr. Lewkowicz,—

In reference to handling coke by inclined belt conveyors we found that we could not handle it at 20 degrees. At 15 degrees we found we could handle it without any difficulty. We also found that no matter at what speed we ran the belt, the coke would have a tendency to slip, and only a certain percentage of it would come up, and the belt wore out very rapidly. Of course coke is very hard to handle under any circumstances

Mr. Archer,—

The handling of coke is a proposition we do not like to discuss. It is one of the few materials which are very difficult to handle by means of conveyors.

Coke and ashes present the most difficult problems in the conveyor line.

On an incline conveyor where cinders are to be handled, which present the same difficulties as coke, we use beaded flight conveyors, details of which I explained earlier in the evening.

Mr. Lewkowicz,—

At what angle was this conveyor run?

Mr. Archer,—

At about 25 degrees. The beads across the belt seemed to help, and prevent the cinders from slipping. The beaded flight conveyor can be used for handling coke, the beads being