

**COLLAPSED COAL TRESTLE.**

One man was killed and two others seriously injured as the result of the collapse of a timber trestle at the East Toronto Yards of the G. T. R.

The trestle was made of cedar posts. For a number of years its whole length was supported by coal piled underneath it, which reached almost to the level of the elevated track. Recently the yards were removed to Mimico, and the coal was carted away. Recently the Grand Trunk decided to put some more coal there, and the crew and engine were doing the work.

In addition to being weakened by the removal of the coal it was found that the posts had rotted at the bottom.

The engine was shunting three loaded cars up the chute for the purpose of dumping them. When they had travelled almost to their destination, the trestle gave way, dropping

crete, and is reinforced with strips 9 ft. wide made up of seventeen  $\frac{1}{2}$ -inch rods running right angles, parallel, and diagonal to the lines of columns.

These rods extend well over the column heads, which are further reinforced with eight 1-inch rods extending 4 ft. down into the columns and radially out into the floor slab about 3 ft. 9 in., so that their ends are on the circumference of a circle about 8 ft. in diameter. The radial rods are bent over a 2-inch x  $\frac{5}{8}$ -inch hoop at the column head, and are wired to 1-inch iron rods bent into circles, one about 4 feet and the other 8 feet in diameter.

On the test, which was made about 90 days after the concrete was placed, one panel was loaded with castings weighing 120,000 lbs., or 286 lbs. per square foot. Although this is nearly double the live load the floor was designed to carry it only showed a deflection of  $\frac{3}{32}$ -inch at the centre of the panel.



Photo by Toronto Star.

engine, cars and men to the ground, a distance of 25 feet. Some 300 feet of the trestle fell. The trestle was made of cedar posts varying in size from 18 to 24 inches. The bents were put up at 20 foot centers.

### TEST OF A GIRDERLESS REINFORCED CONCRETE FLOOR.

The following test, conducted by the Aberthaw Construction Co., Boston, on one panel of the girderless reinforced concrete floor in the Pierce Arrow Motor Car Co.'s new storage building. This floor is supported by columns 20 ft. 6 in. on centres, the column heads flaring at the top to a diameter of 56 in. The slab is 8 in. thick, of 1.2.4 con-

### STATEMENT OF ACCIDENTS DURING MAY, 1910.

Trade or Industry.	Killed.	Injured.	Total.
Lumbering .....	14	14	28
Mining .....	15	11	26
Building trades .....	3	20	23
Metal trades .....	9	32	41
Railway service .....	25	39	64
Navigation .....	11	13	24
General transport .....	3	18	21
Civic employees .....	6	19	25
Miscellaneous .....	10	10	20
Unskilled labor .....	9	9	18