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RAIL-ROAD

Prevention of Accidents on Railroads. On Saturday evening, the 25th inst., the pas senger train from New Haven, and the freight train from New York, came into terrible collision about two miles above Williams' Bridge, on the New York and New Haven Railroad. One fireman and a brakeman were killed instantly, and five or six persons were severely wounded. The passenger train was behind time, and running at the rate of 30 miles per hour; the freighttrain was running at the rate of 16 miles per hour. The engines, tenders, and some cars, were smashed to pieces. The scene was a terrible one. The freight train should have waited at Williams' Bridge, but from what we can learn, there was a misunderstanding, either on the part of the engineer signal-man, or the superintendant of the road. The conductor of the freight train says he believed the New Haven train had passed." The order of arrangement appears to us to have been too loose and indefinite; there was but a single track where the collision took place, and that had a narrow curve, which prevented the approaching trains from seeing one another in time to reverse the engines. The engineer of the freight train is greatly to blame for not stopping, for the flag-man swung his red light, and he should have stopped to inquire the reason of such a signal; but no, on he went, from the double to the single track and in three minutes afterward the terrible collision took place. No excuse can palliate

There should be no single tracks allowed without a railroad telegraph to signal from one station to another. By this means no collisions would take place, for, in a minute, the news whether a down train had left the next station, and vice versa, could be communicated, and thus the detentions of one train could soon be known along the line, and also the place where the other one was, so as to pre vent two trains running, like madmen, one against another. Orders could also be communicated from the superintendant to direct the movements of trains along the line. We have advocated a system of railroad telegraphs before; and we now call the attention of our railroad companies to the subject again. The cost of the telegraph would be far less than the expense of collisions. The mere wreck the engines by the above collision h estimated at \$10,000, but the company will yet have to pay, and justly too, a large sum to the relatives of the killed, and those of the wounded. Double tracks and railroad telegraphs would at least prevent collisions.

this reckless conduct.

City Railroad.

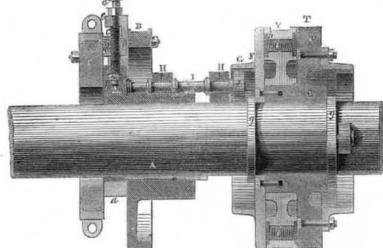
The Managers of the Sixth Avenue Rail road Company, in this city, have reported to the Common Council, that they are ready to commence the work and prosecute it with all a greater or less amount of friction upon it. other end is a bevel wheel gearing into a like reasonable dispatch. Well, we hope it will be prosecuted with dispatch, and as it will no soon be under headway. City Railroads are

the improvements invented by Mr. H. A. hung upon the same shaft; the brake wheel and friction of the pulley on the spur wheel, and Luttgens, of this city, for regulating the speed | spur wheel are secured together and fitted | cause it (the spur wheel) to be driven at the of engines, for which a potent was granted on loosely on the shaft, so as to turn upon it, but same speed as the shaft, and make the ecthe first of last month, (Oct., 1851).

Fig. 1 is a side elevation, and fig. 2 is a sec-

are confined lengthwise; the pulley is fitted tion of a front elevation. The same letters wheel, and is made to drive the brake and cause the governor to exert a greater or less refer to like parts. To render the description the spur wheel by friction, itself being driven amount of friction, on the brake wheel than

more easily understood, we will first describe by a band in the same direction with, but at the pulley exerts upon the toothed wheel, its nature. This consists in a moveable cut- greater speed than the shaft. The brake off eccentric, the stroke of which is controlled wheel is encircled by a friction band which by mechanism which depends for its action is controlled by the governor so as to produce Figure 2.



The mechanism which actuates the eccentric one made upon a screw, which screw, by being consists of a small spindle hung parallel to the turned, alters the throw of the eccentric. The phery; on one end of the spindle is a pinion, is working at its proper speed, the governor

centric stationary, but at the same time, as outside the boss of the brake wheel or spur soon as the speed increases or decreases, it and thus cause the spur wheel to revolve at a greater or less speed than the shaft, when in either case it operates on the pinion and gives rotation to the small spindle and bevel wheels operating on the screw of the eccentric, to alter its throw, to cut off the steam earlier or later as may be required.

> A is the crank shaft of the engine; B is a pulley keyed on it to drive the governor, &c.; it has got a pair of dove-tailed guides, a, secured firmly on it. C is the cut off eccentric with dovetailed, two slides, b, (one shown) secured to its back, and fitting between a a. It has an opening in it, for the shart to pass through, of uch a form as to allow its degree of eccentricity to be altered; c is the screw for altering the throw of the eccentric, one end rests in a threaded centre on the pulley, B, and the other end against the point of a centre screw, d, which fits in a nut, e, secured to the pulley; it is held perpendicular to the axis of the shaft and radial to it, and is prevented from moving end-wise. It carries a bevel pinion, S, passing through a nut, t, in a small box, q, secured to the eccentric. If the screw, c, is turned round, it being placed edgewise, it will cause the nut, t, to move along it and change the position of the eccentric, C.

Dis the brake wheel: E is its deep boss or doubt be a profitable road, we think it will main shaft in bearings secured upon its peri-apparatus is so adjusted, that when the engine hub fitted on the shaft; F is a metal disc secured by bolts to the brakewheel. G is a ring which much needed in this village of 600,000 people. which gears in the spur wheel, and on the shall produce just'so much friction of the brake is toothed inside and secured to the said disc.