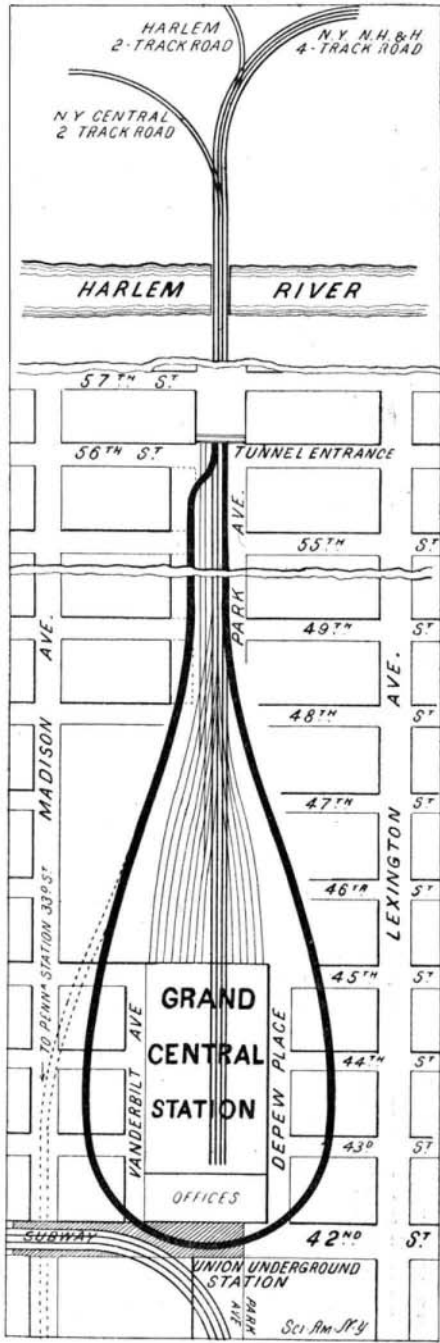


**PROPOSED SOLUTION OF THE NEW YORK CENTRAL TERMINAL PROBLEM.**

If the various railroad and transportation companies that enter, or operate in New York city have read correctly the lessons of the past, they must be convinced by this time, that as a rule, previous improvements in transportation have been planned upon too small a scale; that they have not made adequate provision for the extraordinary rate of increase of population and travel in this rapidly-growing metropolis of the Western Hemisphere. Every new avenue of travel that has been opened during the past few years; every improved schedule of train service, has at once attracted to itself a volume of traffic which, unfortunately, has afforded no corresponding relief on other lines of transportation. We see in this an indication that the existing roads were already overcrowded, and that the needs of the city have always been greatly in advance of the facilities to accommodate them. We have no doubt whatever that, when the four-track tunnel was constructed beneath Park Avenue, its builders were satisfied that they were making the most ample provision for all future increase of



**PLAN OF THE PROPOSED UNDERGROUND LOOP AT THE GRAND CENTRAL STATION.**

travel; yet it is a fact that for many years these four tracks have been altogether inadequate to provide, with due regard for the safety of the public, for the greatly increased number of trains that have been using them.

Our readers will remember that some months ago the SCIENTIFIC AMERICAN suggested that the most effective plan for relieving the congestion in the 42nd Street station and yard would be to build a terminal loop at 42nd Street and separate entirely the local and the express trains, retaining the present yard and train shed for express service, and utilizing the loop for the local service. We pointed out at the time that much of the congestion and delay, both in the tunnel and in the yard, was due to the complicated switching work which was necessary, at the 42nd Street yard, in uncoupling and making up again the local trains at the end of every round trip. We showed that by reserving the inside express tracks for the through trains, and utilizing the outside tunnel tracks and the proposed loop for the local service, local trains could be made up at such places as New Rochelle, South Norwalk, Yonkers, White Plains, etc., and could be run into New York, round the loop, and back to their respective

starting places, without uncoupling a car or changing an engine.

The Park Avenue tunnel and the Grand Central Depot are to-day serving a far more extensive system of railroads than was contemplated at the time the tunnel and the railroad terminal were built. Constructed originally for the service of the Harlem Railroad only, the tunnel is now doing duty in addition for two of the greatest trunk lines in the country, the traffic of either of which, by itself, would find the accommodation of a four-track road none too ample for its needs. By reference to the accompanying diagram, it will be seen that the contributory systems consist of a four-track road, the New York, New Haven & Hartford, which is joined at Mount Vernon by the two-track system of the Harlem Railroad, and is further augmented at Mott Haven Junction by the traffic from the great three-track system of the New York Central & Hudson River Railroad, a system which beyond Albany is, itself, a four-track road. In view of the importance and volume of the traffic which thus accumulates for transit through the tunnel, the wonder of it all is not that this calamitous accident has happened, but rather that such accidents have not been more frequent.

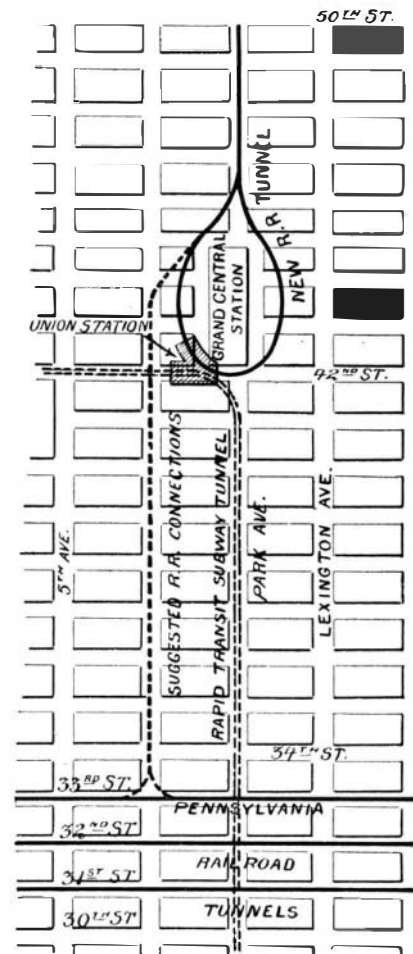
Following closely upon a meeting of the Directors of the New York Central Company, an official statement has been issued to the press, giving a general outline of the plan by which the company proposes to solve both the tunnel and the terminal problem. Briefly stated, the plans contemplate the widening of the area occupied by the present yards and terminals by the purchase of adjoining real estate; the abolishing of steam locomotives from the outside local tracks of the Park Avenue tunnel; the widening of the open cut south of the tunnel from 56th Street and the construction of new tracks therein; the operation of the local suburban trains by electric traction; the construction of a terminal underground loop station at 42nd Street, which, with the side tracks in the tunnel, will be devoted exclusively to suburban traffic. The Directors state that the plan as thus outlined was determined upon some time ago by the company, and that the preliminary purchases of real estate were under way at the time the late tunnel accident occurred. It is understood that the company has already purchased a strip 75 feet in width on the westerly end of all the blocks lying west of Park Avenue between 49th Street and 56th Street, and the published statement says that the company will ask from the Legislature for a change of the location of Park Avenue to the westward so as to obtain the use of the avenue, south of the tunnel, for the tracks of the station yard. From this it is inferred that the purchase of the 75-foot strip of land referred to has in view the shifting of Park Avenue bodily to the westward and the enlargement of the width of the approach to the station yard to take in the full width of the avenue. It is understood that the New York Central Company has bought up the blocks lying east of the station yard between 45th and 42nd Street and Lexington Avenue. The company also owns most of the property lying between 42nd Street and 45th Street and Vanderbilt and Madison Avenues, and as they ask permission to construct a tunnel underneath portions of 43rd, 44th, and 45th Streets, and Park, Vanderbilt and Depew Avenues, it will be seen that the location of the proposed tunnel loop may be determined with considerable accuracy. The side tracks, which are to be operated electrically, will commence to be depressed as soon as they leave the tunnel at 56th Street and will run down on an easy grade to the underground terminal loop.

An interesting fact brought out in the statement of the company, which is not generally known to the public, is that when permission was originally given for the construction of the Park Avenue tunnel, it was expressly specified that only steam traction was to be used for operating the trains that passed through it. This stipulation was made so as to prohibit the use of horse or any other animal traction; a fact which is a curious commentary upon the conditions, or supposed possible conditions, of railroading in that earlier day. As matters stand, it would seem that the railroad company has at present no choice in the matter of using steam locomotives between Mott Haven and its 42nd Street terminus.

The use of electric traction will not only relieve the tunnel of much of the smoke and steam which undoubtedly have served to obscure the signals in times past, but it will greatly increase the comfort of suburban travel, and will enable the three roads that run into 42nd Street to greatly increase their train service. Not only so, but the construction of the loop terminal will bring these trains at 42nd Street into close proximity to the trains of the Rapid Transit road, which is now being constructed up Park Avenue and through 42nd Street, the line curving around at the intersection of these two thoroughfares, as shown in the accompanying diagram. The 42nd Street underground station of the Rapid Transit road is to be located at Vanderbilt Avenue, and therefore in close proximity to the underground station of the New York Central

Company. Evidently there is here presented a great opportunity for the construction of a grand union underground station, by which the passengers may pass from the suburban to the Rapid Transit train with the least possible delay. Moreover, since the gage of the tracks is the same on both systems, it would be a simple matter to put in connecting tracks that would enable Rapid Transit cars to be run from Brooklyn or the Battery out to Yonkers, White Plains, or New Rochelle without a change. As a matter of fact the Rapid Transit Commissioners made proposals some time ago to the New York Central Company with a view to co-operation somewhat on these lines; but the latter company refused to entertain the suggestion. Of course, it would be impossible for the New York Central and New Haven cars to enter the rather restricted limits of the Rapid Transit tunnel, but there would be no obstacle to running the Rapid Transit cars out onto the suburban roads.

Taken in connection with the proposal of the Pennsylvania Railroad Company to build a series of tunnels beneath Manhattan Island to connect New Jersey roads with Manhattan and with Long Island, the New York Central tunnel would offer excellent advantages for the running of through trains between points on the Pennsylvania and the New York Central and New Haven systems. The necessary connections could readily be effected by building a tunnel from the westerly side of the loop beneath the Grand Central Station to Madison Avenue and down Madison Avenue



**PLAN SHOWING SUGGESTED CONNECTION OF THE NEW YORK CENTRAL AND PENNSYLVANIA TUNNEL ROADS.**

to connect with the 31st Street tunnel of the Pennsylvania Railroad. By the construction of a Y at 31st Street, it would be possible to run New York Central trains either to the west to New Jersey or to the east to Long Island. If the New York Central Company were disposed to construct a yard on Long Island for the storage of cars and trains, they would save several miles in distance and much time that is now consumed in running empty trains through the Park Avenue tunnel between the Mott Haven yards and the 42nd Street station.

**A Newspaper Obituary.**

The following announcement was received by us in our mail a few days ago, with the information that the Poulan Herald would be obliged to discontinue. The note read as follows: "In Loving Memory of the Poulan Herald. Born October 19, 1895. Died January 5, 1902.

The Good Die Young.

The clanking press, the clicking type  
Are still as still can be;  
Our shooting-stick hangs with our harp  
Upon the willow-tree."

The Swedish government is considering the feasibility of working all its railways by electric traction in lieu of steam. This should prove an easy matter to accomplish, owing to the abundance of waterfalls throughout the country, to supply the necessary power for generating the electricity. Such a system would prove far cheaper than the present steam traction.