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(Illustrated articles are marked with an asterisk.)

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THE ELEVATED ROADS AND THE RAPID TRANSIT PROBLEM.

The judgment of the Appellate Justices upon the late proposal of the Rapid Transit Commission should be read by every citizen who is interested in the subject of increased transit facilities. It judges the question from a broad standpoint, and shows a conservative regard for the permanent interests of the city. The court points out that the scheme, as presented for its judgment, was very incomplete, and that the data upon which the estimates were based was insufficient to give them any reliable value.

With the verdict of this court against it, the underground tunnel may be considered as out of the question, at least for many years to come. In any case it was a scheme which would have been attended with serious drawbacks; and were it now completed and in operation, it would have to contend with the natural repugnance of the people to descending a flight of stairs and burying themselves in an artificially lighted and more or less imperfectly ventilated tunnel for a quarter or half an hour as the case might be.

The construction of the tunnel being out of the question, attention will naturally be directed to the elevated roads; for in the extension and improvement of this system is to be found an alternative scheme which would provide the city with greatly improved facilities at a comparatively early date. We have good reason to believe that these roads would have been extended and improved before this if the city had shown any disposition to grant the necessary permission.

If the officers of the elevated roads are sincere in their expressed desire to extend their system, the next and immediate step should be to place their proposal before the Rapid Transit Commission—a commission that was created for the express purpose of receiving such suggestions.

The matter is an urgent one, and there can be no possible excuse for a lengthy delay upon the part of the company. On the other hand, any proposals that may be offered should be judged with the sole object in view of the city's best interests.

If, however, the elevated roads should make no further move looking to extension of their system, the city should use the strong arm of the Legislature in its behalf. The case is too serious to admit of delay. The volume of travel is steadily increasing and already in some quarters it fairly swamps the accommodation provided for it.

A FOSSIL bird, represented by a piece of a bone from a bed of clay on Vancouver Island, is described by Cope, who thinks that it may have been "the largest bird of flight thus far known."

PROPOSED EQUIPMENT OF THE NEW YORK SURFACE ROADS WITH COMPRESSED AIR MOTORS.

The Metropolitan Traction Company, which controls altogether about 132 miles of street railway in this city, and carries daily upward of 650,000 passengers, is contemplating an important change in the motive power of a large portion of its lines.

It has been determined to make a thorough trial of a compressed air motor which has been designed by Joseph H. Hoadley, of the engineering firm of Hoadley Brothers, who is now associated with the American Wheelock Engine Company, of Worcester, Mass.

The air will be carried in two cylindrical steel tanks placed between the trucks and beneath the floor of the car, and they will be charged at an initial pressure of 2,000 pounds to the square inch.

The operation of these cars will be watched with close attention, not merely by the company which is making the experiment, but also by the engineering world at large. Engineers in the United States have been so fully occupied with the development of electric traction—and it has had a growth and a success which is phenomenal—that comparatively little attention has been paid to other methods of traction which utilize the oil, gas, and compressed air motor.

On another page will be found a description and illustrations of a compressed air locomotive, which has proved very successful in the mines of the Susquehanna Coal Company, Glen Lyon, Pa.

The St. Louis Disaster.

For the second time within the present generation the city of St. Louis has been visited by that scourge of the Mississippi Valley, the tornado. It was on the evening of March 8, 1872, that the ever memorable cyclone carried death and destruction through this ill-fated city; and to-day the citizens are again occupied in the sad task of burying the dead and caring for the wounded that have been smitten by this worst form of nature's savagery.

The full cyclonic force of the storm of Wednesday evening was not felt at the outset, but appears to have been preceded by a violent wind storm, which swept over the whole city at the rate of eighty miles an hour. This was succeeded by a heavy deluge of rain, in the midst of which the cyclone developed in the southwestern suburbs and cut a wide swath of destruction through the city.

The destruction was wrought with that speed and completeness which marks the passage of a tornado, and in a few minutes some 400 to 500 are estimated to have been killed outright and over 1,500 wounded, while the damage to property will amount to many millions of dollars.