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# SCIENCE NCE [Entered at the Pos -Office of New York, N.Y., as Second-Class Matter.]

## A WEEKLY NEWSPAPER OF ALL THE ARTS AND SCIENCES.

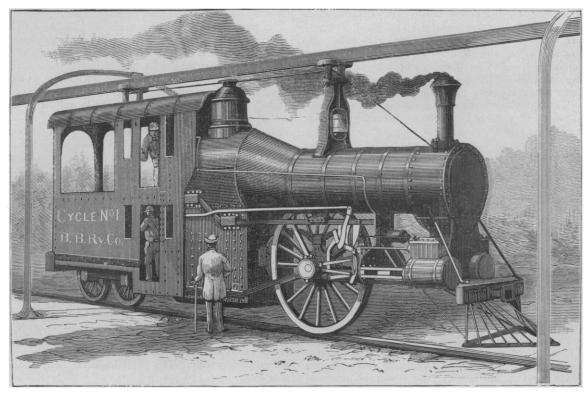
SEVENTH YEAR. VOL. XIV. NO. 350.

NEW YORK, OCTOBER 18, 1889

SINGLE COPIES, TEN CENTS. \$3.50 PER YEAR, IN ADVANCE.

### THE BOYNTON BICYCLE RAILROAD.

A TRIAL trip of the Boynton bicycle locomotive and cars was made on the company's experimental track, between Bay Ridge and Coney Island, on Monday last. A portion of the old Sea Beach Railroad track was remodelled for the purpose by the erection of uprights supporting the guard-rail shown above the locomoreached, however, as near as could be computed on a short track, was at the rate of twenty miles an hour. The road had a rise of 98 feet in 4,300 feet of length, and was nearly all curves, and consequently was well adapted for testing every point of the new system except speed. The motion of the train was remarkably smooth, and free from jolts.

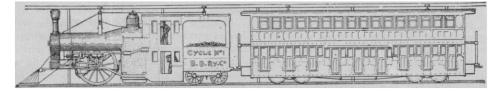


### BOYNTON BICYCLE LOCOMOTIVE.

tive in the illustrations. By the placing of a guard-rail of this kind above each rail, an ordinary single-track road may be converted into a double-track road for the Boynton system, the locomotives and cars being so narrow that trains will pass each other under such circumstances without danger of coming into contact.

On Monday's trial-trip the train consisted of Cycle Engine No. 1,

The locomotive weighs twenty two tons, and its total height is 15 feet 6 inches. It has a single driving-wheel of 7 feet 9 inches diameter, with double flanges, to ride on a single rail. The cab is two stories high, the upper story being occupied by the engineer, and the lower by the fireman. The engine has two cylinders, 12 by 14 inches each, and is operated with a boiler-pressure of 150



BICYCLE LOCOMOTIVE AND PASSENGER-CAR.

and one car of eighteen compartments. The car was fitted to seat one hundred and eight persons, and that number made two trips over the road to Coney Island, and back to Gravesend. It is claimed by the inventor, the Hon. M. E. Boynton, that a speed of one hundred miles an hour can be obtained with this system, although no effort was made to run at a high rate of speed on this occasion, owing to the bad condition of the road-bed. The speed

pounds to the square inch. The passenger-cars are 4 feet wide, 14 feet high, in two stories, 40 feet long, and are designed to weigh five tons each.

Future developments of this system, as to speed, economy of construction, operation, and maintenance, and general adaptability to regular passenger and freight traffic, will be awaited with interest by all concerned in railroad operations.