

COMPLETION AND TESTING OF WATKINS GLEN RAILROAD BRIDGE.

The Grand Structure a Perfect and Most Gratifying Success.

An announcement, through the papers of this village last week, that the Watkins Glen Railroad Bridge, of the Syracuse, Geneva and Corning Railway Co., would be tested at 9 o'clock, on Monday morning, Sept. 24th., drew together at that hour a large crowd from Watkins and all the adjacent parts of the county, numbering from 1,500 to 2,000 people. They came in private carriages, public hacks, farm wagons and all other kinds of vehicles, and the vicinity of the bridge, on both sides of the Glen, resembled a camp meeting ground, so great was the throng of eager expectants, men, women and children, some time before the exciting event began to transpire.

AT HALF PAST NINE

the shrill scream of a locomotive, on the south side of the great chasm, 450 feet wide and 150 feet deep, signalled the first test; and in a few moments thereafter the "Antrim," one of the Fall Brook Coal Company's heavy engines, ran out over the yawning abyss, and slowly made its way to the north side, with Mr. H. Clark, the construction superintendent and a few of his employees, and those of the Railway and Fall Brook Companies, on board. Breathless silence prevailed on both the northern and southern shores, during the crossing, although no one anticipated anything but a success, and the scene presented was inspiring, and full of grandeur, not unmixed, in the minds of some, with an indefinable feeling of tremulousness and fear; the light, airy and skeleton-like, though complicated wrought iron structure really seeming, to the uninitiated in such matters, incapable of standing such a test on its long spans between the central trestle-tower and the northern and southern abutments and piers.

A SIGH OF RELIEF

escaped many womanly and some manly breasts, as the Antrim (named in honor of the country in Ireland from which the father of the late Hon. John Magee, emigrated to this country) proudly passed the center of the northern span, and safely rested on the northern side of the gulf. The engine soon returned amid the waving of handkerchiefs and hats, above and below, and in a few moments again passed over, accompanied by the heavy Fall Brook Coal Company's locomotive, "J. P. Haskin," the bridge seeming to be no more tried, than as if a pair of feathers or fern leaves had been blown across by the wind.

THE "ANTRIM" AND "J. P. HASKIN"

returned to the starting point, and in a few moments again passed over accompanied by one of the heavy Fall Brook Coal Company's switch locomotives, all three of which had gradually gathered up adventurous passengers until they were crowded with human beings. These three monsters of strength and power, whose aggregate weight, as will be seen below, was over 164 tons, produced no perceptible effect (to the naked eye) upon the bridge though halted, for careful observation by instruments, over the two long spans. They returned, and again passed over at considerable speed, shrieking and screaming to the full extent and capacity of their whistles, which fairly made the welkin ring for miles around, and woke far and near, the wildest echoes of the Glen. This, the last time, they drew four flat cars heavily laden with iron, and a Fall Brook Co.'s passenger car, all crowded with passengers, (invited and uninvited guests) whose cheers and waving handkerchiefs, hats and caps, were well responded to by the enthusiastic multitude below. It was an enchanting spectacle, not soon to be forgotten by those who were so fortunate as to behold it.

THE TEST

was a very thorough and trying one, the result one of the most remarkable, triumphant and satisfactory on record, and all the parties interested and concerned, the contractor of the road, Gen. G. J. Magee, the Niagara Bridge Works, of Buffalo, and their superintendent of construction in charge, Mr. H. Clark, the Syracuse, Geneva & Corning Railway Co., the Fall Brook Coal Co., and lastly the public along the whole line of the new road, have abundant reason for mutual congratulation, gratitude and joy, that this grand and imposing structure, the most important and costly on the whole route between Corning and Geneva, has been safely and successfully completed and proven to be one of the most perfect and substantial works of its class ever erected in this or any other part of the country.

THE DEFLECTION

in the final test with three engines, four flat cars loaded with iron, a passenger car and hundreds of people, was only 1-2 an inch at center of the south, or 140 feet span, and 1-4 of an inch at the center of the north, or 120 feet span; while at the center of the tower work, resting on stone piers at the middle of the Glen, it was but 1-4 of an inch. These results show a most wonderful accuracy in the construction, and a perfection of mechanism in putting together, unparalleled in the history of iron bridge building in the United States.

THE WEIGHT SUSTAINED

was greater than can ever be put upon the spans of the structure, in the ordinary course of business, being as follows:

Engine No. 11.....	39 1-4 tons
" " 14.....	62 2-5 "
" " 16.....	63 "
Four loaded cars.....	73 "
Passenger car and people (say).....	12 "

Total, about.....250 tons.

It is quite evident that this bridge will sustain any amount, in engines, coal, passenger and freight trains that can be crowded upon it at good speed, and that it will endure an incredible amount of "wear and tear," so to express it, for 50, and perhaps 100 years to come.

DIMENSIONS &C.

Watkins Glen Bridge is 450 feet in length, the girder of the first south span being 35 feet long; the long south span 140 feet; middle tower, at top, 30 feet; north long span 120 feet; north minor or approach spans, 25 feet each (or 125 feet,) the total making the length above stated. Height above the water level of the Glen to top of rail, on roadway, 150 feet—the highest iron railway bridge, (except that at Portage) in the interior of the State. This kind of a structure is known as the "Riveted Lattice Bridge," and the two most important officials connected with the Niagara Bridge Works, where it was manufactured, are Geo. C. Bell, General Manager, and Samuel J. Fields, Engineer. The officers of the Syracuse Geneva & Corning Railway, now rapidly approaching completion are: John Lang, President and Treasurer, Alexander Olcott, of Corning, Secretary, Gen. G. J. Magee contractor for building the Road, and A. Hardt Chief Engineer. The officers of the Fall Brook Coal Company, (which Co. is largely interested in the new Road) are: G. J. Magee, President, John Lang Treasurer, A. Hardt Superintendent.

DISTINGUISHED VISITORS PRESENT.

Among the distinguished visitors who were present at the testing, and crossed the bridge on the engines or cars, in addition to the contractor of the road, the chief engineer, and the Superintendent of the work,

G. R. Blanchard, vice president of

the Erie railway; Mr. Barbour, private secretary of Receiver Jewett; Mr. Chamberlain, Auditor of the Erie; Hon. E. N. Frisbie, (Elmira) of the Coal and Transportation Department of that road; Mr. Hough, of the Pennsylvania & Erie Road; George M. Diven Esq., Charles J. Langdon Esq., and ex-Mayor Smith, of Elmira; W. T. Hamilton, of the Morris Run Coal Mining Company, and other gentlemen from various sections of the State, all of whom spoke of the Bridge, and its highly successful and satisfactory test, in strongest terms of admiration and praise.

GENERAL OBSERVATIONS.

Watkins Glen Railway Bridge, is beautifully and romantically located, and crosses the Glen about a mile west of the Glen Mountain House. It presents a most remarkable sight to visitors passing through the Glen below, and is a great attraction added to the magnificent scenery of this world renowned summer resort, which commands the homage of tens of thousands of tourists annually. The view presented in crossing the Bridge is wild, startling and thrilling, and, in connection with this new route, it will give Watkins Glen a greater notoriety than it has hitherto enjoyed.

The number of cubic yards of masonry (large and solid blocks of Waterloo limestone) in the piers and abutments of the Bridge, is, to a fraction, 451, and the work, done under contract by James Conway late of Rochester, and now a resident of Watkins, is of the very best and most enduring quality—all the masonry on both sides, and at the center, being based upon the solid rock. No one can inspect these solid and massive foundations of the noble superstructure without realizing that Mr. Conway is indeed a master in the profession which he has chosen. The weight of iron in the structure is 150 tons. According to the best information we have been able to obtain the total cost of the Bridge will be about \$30,000.

The building of such a grand iron structure, in such a locality, and over such a gorge, has been a task of no easy accomplishment, but fraught with great expense difficulty and danger; and Mr. Clark Superintendent of construction, representing the Niagara Bridge Works, is entitled to great credit for the completion of the work, without the loss of life or limb, and without a single accident of any consequence, from beginning to end. He has managed the trust confided to him with admirable discretion, great care and caution, and with most consummate tact and ability, and has the heartfelt congratulations of our entire community, on the triumphant success and gratifying conclusion of his long and arduous labors. This noble Bridge will long remain a proud monument to the enterprise, genius, and mechanical skill of those concerned in its inception and erection; and we trust, defying the action of the elements, be but lightly touched, for many future years, by the hand of Time.