On the morning of Saturday, October 2, 1875, a group of prominent New Yorkers boarded a special train at the Jersey City depot of the Pennsylvania Railroad. They were going to Phoenixville for the day as guests of Clarke, Reeves & Co. to witness the trial of a new rapid transit idea for which some unusual claims had been made. High-ranking engineers and railroad officials were reluctant, at this late stage, to walk a block out of their way for another elevated scheme. The Rapid Transit Commission had already looked into scores of proposals, and its report and recommendations would be released within a week. Yet on that southbound train, with Thomas C. Clarke, Reeves' engineering partner, acting as host, were such notables as

Gen. J. G. Barnard, wartime chief engineer of the defenses of Washington; Gen. H. G. Wright, soon to be named chief of Army Engineers; Gen. Ira Spaulding, divisional chief engineer for the Northern Pacific; Prof. R. H. Thurston, head of the nation's first mechanical laboratory for research in engineering; D. W. Wyman, superintendent of the Greenwich Street Elevated; J. H. Burtis, president of the Brooklyn Elevated Railway; several directors of the New York Elevated Railroad; the secretary of the Car-Builders Association; and members of the press.¹⁹

Roy Stone may have been known to the military members of the party. But only the most enthusiastic backing by a man of Reeves' influence could have assembled such a group of observers.

At Germantown Junction (now North Philadelphia) it was necessary to transfer. Arriving there about noon, the group was greeted by Reeves, who was host to a number of prominent Philadelphians.²⁰ The combined party boarded another special, switching westward to the Reading line. En route they partook of lunch, wine was liberally served, and a generally festive spirit prevailed as the train followed the scenic course of the Schuylkill.

Somewhere between Fairmount Park and Phoenixville, Gen. Spaulding died of a heart attack, and that, in the words of the Daily Local News of West Chester, "naturally had the effect to cast a gloom over his traveling companions." 21 Probably few noticed as the train passed Valley Forge; and Reeves perhaps forgot, under the circumstances, to remind his guests that Phoenixville also had a claim to Revolutionary War fame, being the farthest inland point invaded by the British. The corpse of General Spaulding was brought to a Phoenixville funeral parlor, temporarily, and the party proceeded to the Phoenix Iron Works. There, about 1:30 P.M., they were greeted by General Stone, and took — we may be sure — an astonished first look at his invention.

A single-rail track, raised on column supports an average of twenty feet off the ground, with steep inclines and a sharp curve, rambled across the deserted factory yard for a fifth of a mile. Properly speaking, it was not a single rail at all. It was three rails mounted on an A-shaped truss. At the apex was the heavy, bearing rail on which the equipment rode. At the crossbar of the A, spaced about 3½ feet apart, were two parallel guide rails.

Jauntily poised on center bearing wheels, a weird little locomotive and coach straddled the top rail. A low center of gravity was its salvation. As the covers of a book draped over a pyramid, the sides of

21 There are (at least) four contradictory accounts of Gen. Spaulding's demise, and I have chosen the most dramatic though not necessarily the most accurate. The Daily Local News says: "The visitors came in special cars .... On their way here, one of their number, Genl. John B. Spalding, Chief Engineer of the Central Pacific Railroad, died suddenly, on the road between here and Fairmount Park...." The Philadelphia Public Ledger, Oct. 4, 1875, p. 1, col. 7, reports: "Shortly after the Express train on the Reading Road, which left this city [westward bound] at 9:15 A.M., on Saturday, had started, the attention of the passengers was called to a gentleman on the car who was apparently gasping for breath. A physician who happened to be on the train at once attended him, but he died in a few seconds. From papers in his pocket, and his name engraved on his watch, it was believed that the deceased was General Ira B. Spaulding, but he was not positively identified until the train arrived at Phoenixville, where he had been two days previously, and to which place he was on his way, to meet prominent New York gentlemen to witness a trial of a new elevated street railway. The remains were brought to this city on Saturday evening, and were the same night sent on to New York, where he has resided for some time." The New York Daily Tribune, Oct. 5, p. 5, col. 2, carries an obituary with the surprising information that Gen. Spaulding, "well known as a railroad engineer, died at his residence in West Seventeenth st. on Saturday ...." The Railroad Gazette, Oct. 9, 1875, p. 419, states that "Gen. Ira Spaulding .... died suddenly of heart disease Oct. 2, while on his way eastward [emphasis supplied] from Harrisburg, Pa., in a train on the Reading Road." This incident is peripheral to the Phoenixville event and I have not pursued the matter further.
the engine and car extended down, covering the guide rails. Against these side supports, horizontal guard wheels with rubber rims were pressed to maintain a seemingly precarious balance.

In the observers' minds that day were words from a report of the Society of Civil Engineers that "a rapid-transit road must not only be safe, it must appear so"; otherwise the public would refuse to ride on it. The guests were agreed on the actual if not the apparent safety of the monorail. The train might sway from side to side like a metronome but the flanged guard wheels with their adjustable tension made it impossible for cars to run off the truss. The locomotive was further stabilized by the weight of fuel and water stored in compartments below the center of gravity.

To General Stone fell the task of explaining the workings of his system. In this he was embarrassed by the fact that, for an hour or two after the visitors' arrival, the locomotive would not steam very freely. It lacked a blower. Hoping to improve its efficiency, Stone that morning had risked a last-minute change in the arrangement of the exhaust. At first try, the engine could not pull the coach. To the anguish of Messrs. Reeves and Clarke, the General halted the demonstration for further tinkering.

It was not, as the guests were quick to perceive, a single engine that drove the front and rear center-wheels, riding on the bearing rail. There were two separate engines with two chimneys, "the whole being boxed in so as to resemble . . . the deck house of a steamer." Upright boilers stood on each side of the locomotive like sentinels, both maintained by separate fires. They were base-burners, similar to ordinary stoves. Each had a vertical central flue extending from fire box to chimney top. "Ludicrous as it may seem," observed the Railroad Gazette, "the coal is fed from the top of the chimney, Santa-Claus fashion."

Some of the spectators demanded to know how trusses of this kind could be made to cross each other. The manner of switching that Stone proposed — by moving a whole section of the triangular track — did not look too practicable. But the locomotive bore the brunt of their criticism.

There were indeed elements of the absurd about this piece of equipment. Basically, it was a rotary steam engine without pistons built by the LaFrance Manufacturing Company of Elmira, N. Y. In business just three years, the LaFrance brothers had met Stone's needs with an ingenious adaptation of the force-pump used in their line of steam fire engines.
Possibly, one of the mechanics sweating over the engine's problems that afternoon was the co-founder of the company, Truckson LaFrance.

There were other signs of unreadiness on the testing grounds. The 900-foot experimental track, supported by Phoenix iron columns, was constructed almost entirely of wood. No doubt, this was lumber from Cattaraugus County, cut to specifications in Stone's sawmill. Though Reeves had commenced production of the A-truss, only two 50-foot iron spans had actually been completed and placed in position.

A welcome diversion was created by the arrival of more guests. Prominent in this group was Franklin B. Gowen, president of the Philadelphia & Reading, along with several of the company's directors.

Still awaiting resumption of the demonstration, the observers were treated by the General to a lecture-tour of the passenger car. They mounted wooden stairs to an elevated platform and boarded the monorail. It was a two-tiered coach, not much over twenty feet long, seating sixty riders. A double row of oval portholes lighted the ceiling. The windows on the sides were tall and narrow, ending in an arch at the top and alternating as fixed panels and doorways. An outside walkway ran the length of the car on either side, protected by a railing.

As Stone remarked with somewhat solemn facetiousness, the car was designed on "the saddle-bags plan." A considerable portion of the car's weight hung below the top rail, onto the sides of the truss. It rocked slightly as the visitors crowded to one side, allowing Stone to demonstrate the lateral stabilizing effect of the guide wheels.

On the upper level, reached by six steps, passengers would be seated in two long rows facing each other, as in a horse-car. On the lower level, with their backs to the rail, passengers would face outward, jaunting car-style, to an exciting, high-altitude view of Manhattan.

At about 3:30 p.m., the LaFrance locomotive showed robustness, and the trial was resumed. Any historian would pay a high price at this point for an authentic, or even apocryphal, story to the effect that Stone called for volunteers to ride in the coach and that all of his guests politely declined the honor. Then, it would be said, Mrs. Stone, who had journeyed down from New York to share in her husband's triumph, climbed disdainfully aboard, leading her ten-year-old daughter, Romaine, and holding three-year-old Richmond in her arms.

We cannot be sure who, if anyone, rode on that first public tryout of the passenger monorail in America. But all observers from out-of-town agreed it was a success. The New York Times said the demon-
stratization was "entirely satisfactory," adding that Gen. Barnard and other engineers who witnessed the trial "expressed their approval of the plan." The New York World reported, "The test of running the dummy and car on this short stretch of track proved very successful." According to the Daily Graphic, "The verdict . . . was one of decided admiration for and endorsement of the new plan." The Railroad Gazette, overcoming its initial skepticism (and risking derision from the engineering fraternity), drew its breath and pronounced,

The engine . . . worked very smoothly and passed around the curve of 90 feet radius with apparent ease, and the car affords all necessary comfort to passengers . . . . We believe the plan possesses some very great advantages for rapid-transit roads in cities.

Elated by the good reviews, Stone and Reeves spoke of their plans. They proposed to bring the demonstration to New York City. If the authorities would grant permission, the promoters would erect 500 feet of track temporarily in a park, "to allow citizens to ride over this length at their pleasure." Afterwards, at the Centennial Exhibition in Philadelphia, opening in just eight months, they would introduce General Stone's Elevated Railway to the entire nation.

* * *

The Phoenixville demonstration had been well timed. Just two days later, in executive session, the Rapid Transit Commission adopted engineering specifications for all future elevated railroad construction in the city of New York. The public report was briefly withheld, and several days of intense speculation followed as the press began piecing together its contents.

The choice had been narrowed to four variations. For a broad street of the Third Avenue type, consideration was being given to a "one-legged" road over each sidewalk, a double track and double column road spanning the horse car tracks, . . . . a structure spanning the entire roadway . . . . [and a plan requiring] one row of supporting columns at the curb and the other in the center of the street.22

For narrow streets, however, the Commission was reported to favor a curb-to-curb elevated construction. If true, General Stone's system could not be universally adopted.

On Thursday, October 7, 1875, the Commissioners issued their statement. In the immemorial tradition of such bodies, their decision was to make no final choice. They accepted all four plans. Within a framework of technical requirements stated at considerable length,

they would allow "companies which may construct the railways to select the best features of each."

Thus avoiding a commitment, the Rapid Transit Commission took immediate steps to prevent any incompatibility of systems arising from competition. It approved an amicable agreement between the Gilbert Elevated and the New York Elevated to construct new routes partially in common, and elsewhere divide up the territory. This consolidation of interests later became known as the Manhattan Railway Company, and the action left no doubt as to who the constructing companies would be.

It is likely that Stone already was aware of their engineering predilections; if not, he had only twenty-four hours to wait for the first clue. One of the company directors, on October 8, was quoted as favoring the use of gothic arches from curb to curb. Less than a month later, a majority of the members of the executive committee of the Manhattan Railway Company were reportedly in favor of a conventional double-rail system.

Meanwhile, Stone had applied to the Park Commissioners for permission to exhibit in City Hall Park. Clarke, Reeves & Co. earlier had agreed to handle these arrangements, but now it seemed that the General was on his own. For, after publication of the rapid transit report and creation of the elevated combine, Samuel J. Reeves evidently had made the prudent decision not to be identified further with Stone's elevated scheme. His firm naturally was interested in selling structural iron to any builder of any version of rapid transit.

While waiting for a response from the Park Commissioners, Stone had an artist make up a small (20⅛"x16½") photolithograph poster for anonymous distribution. It was entitled, "Pen Sketches of Rapid Transit." Ostensibly this was a portrayal of the principal elevated styles that had been approved. These appeared in realistically-drawn, black-and-white street scenes by one Gustave Dieterich. Shown alongside Stone's system were an elevated structure spanning the street from curb to curb and a double-track elevated road supported by columns straddling the existing horse-car tracks.

The poster was a cleverly conceived propaganda piece, appealing

24 New York Daily Tribune, Oct. 8, p. 8, col. 3; and Nov. 3, p. 2, col. 5.
over the heads of transit officials to the citizens of New York. Rear cars of the competing elevateds are shown with wheels poised at the end of the tracks, as though about to roll off a precipice. Voluminous, ugly smoke billows from their locomotives. On the street-level below, discordant traffic jars the senses. Parked delivery wagons block the outer lanes, forcing carriages and drays to twist in and out of the rows of pillars. Disturbed and unmanageable horses add to the irritating effect. Moreover, citizens of dubious character lounge against the columns or loiter at the curb. And buildings on both sides of the street bear signs reading, "removed" or "this house to let."

Stone's elevated line, by contrast, is set in a quiet street scene showing no surface traffic at all — only sedate, respectable pedestrians and a sign on the third floor of the building adjacent the monorail which reads, "Scientific American Patent Office."

Undoubtedly, Stone stood behind the drafting board. Dieterich, otherwise unknown, was the same commercial artist Stone had employed to illustrate the monorail's patent application earlier in the year, dated March 20, 1875.

That had been a period of personal sorrow for the General. Only a week before, on March 13, his mother, Sarah Gurnee Stone, had died in Cuba, N. Y., at the age of seventy-three. By rural standards the estate was large, and Mrs. Stone's will was a complicated one. Her son Roy was the chief heir, with the next largest share going to her unmarried, forty-year-old daughter Cornelia.26 Eight grandchildren and other relatives and friends were remembered, but one daughter was totally ignored in the will. This was Roy's sister Ella, who had gone off and married a Brooklyn lawyer by the name of Davis and become estranged from the family. Ella contested the will.

Thus, while preparing for the Phoenixville demonstration, Stone had been enmeshed in legal and personal problems arising from his mother's estate. His inheritance included the family home in Cuba, twenty miles distant from Vandalia.

It was a large, rather distinguished frame house built by his clean-shaven father in the neo-classical Greek style. It stood on a corner lot with the inevitable horse block and hitching post in front. Long blinds shielded the two front doors. A low white iron railing adorned the front porch, which was approached by a marble walk. The house stood (and still stands, minus hitching post, marble walk and iron railing) on the corner of South and Stone Streets. Some time in the

26 In 1881, Cornelia Stone married the Governor-elect of Indiana, Albert Gallatin Porter.
spring of 1875, the General took possession of the Cuba residence.

Cuba, where Stone had grown from boyhood to manhood, was a pleasant market center on the Genesee Valley Canal and the Erie Railroad which had somehow never fulfilled the promise of its transportation advantages. There, however, the elder Stone had "amassed a liberal fortune" in the lumber trade, and the reputation for being "a model in morals and honor . . . . strictly temperate in his habits and conscientious in all his dealings." 27 The son inherited a name as well as property.

It did not, at first, seem a farewell to Vandalia. By train he was less than an hour from the lumber camp. The house was more comfortable than his rustic hermitage, and there were advantages that even a town of 1,000 population offered children whose home had been in the wilderness. Proof, however, that Stone did not immediately relinquish his woodland idyll is found in the fact that his application for patent on the rubber-rimmed feature of the guard wheels, filed in November 1875, still bore the Vandalia address.

The dispute over the will was resolved in December 1875. With the approach of winter the General also could see that his single-rail system had gained no new advocates in New York City. The Park Commissioners apparently had denied him permission to exhibit the monorail on public property. The poster campaign, which Stone had hoped would rally popular support, seemed to be backfiring. Not only did it offend the elevated companies, who were planning to create the nuisances shown in the poster, but it strengthened neighborhood opposition to rapid transit of any kind. Property owners along the proposed elevated routes (especially Third and Sixth Avenues) were preparing to fight the companies in the courts.

The Gilbert Elevated, confident on legal grounds that it did not need the consent of Sixth Avenue residents, chose this moment for an announcement that it would begin construction in the spring of 1876. Its system would resemble that of a conventional surface railroad, with "an arch upholding the elevated tracks from beneath and spanning the roadway of the street." 28

For the General, this made all the more urgent the necessity of exhibiting to the public at large a working specimen of his Elevated. The forthcoming International Exhibition in Philadelphia, celebrating

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the hundredth anniversary of the Declaration of Independence, offered the largest possible audience for that purpose in the most dramatic setting conceivable.

Fairmount Park, the guidebooks agreed, was the greatest public park ever designed. Its 2,991 beautified acres extended for miles along the Schuylkill River. Amid the “rocky precipices and grassy plains, wooded hills and secluded dales, meandering rivulets and murmuring waterfalls,” some 260 acres had been set aside for the greatest exposition the world had ever seen. The theme would be “Progress in the Arts and Sciences.” It would open May 10, 1876.

Stone faced a problem. He had to find some basis on which he could be admitted as an exhibitor. He proposed to demonstrate the monorail as he had in Phoenixville, by putting it in actual operation and allowing people to ride in it. To help the Installation Bureau visualize the plan, he had D. F. Kennedy make a watercolor sketch of what it would look like.29 But to these officials it looked like what it really was — a passenger service. And they informed Stone that the fair’s managers already had awarded an exclusive carrier concession.

For a consideration of $20,000 the recently-formed West End Passenger Railway Company of Philadelphia had purchased sole rights to transport passengers inside the Exhibition. No carriages would be allowed within the grounds. The company, a horse tramway that operated between Woodlands Cemetery and the Zoological Garden, was installing a narrow-gauge, steam-powered railroad, four miles in length, to serve the principal exhibition halls.

That might have ended the General’s rapid transit campaign, had it not been for one unforeseen circumstance. Someone observed that the meandering little railroad in Fairmount Park failed to provide transportation to one of the important exhibit areas.

Horticultural Hall, a mosque of ironwork and arched glass, stood at the eastern boundary of the fair grounds. It was close to a minor entrance gate on the riverfront drive. But because of the park’s topography, this pseudo-oriental conservatory, with its kiosks and ornamental tile and pennants flying in the wind, sat in a semi-isolated position. It occupied a plateau between two wooded ravines (Landsdowne on the south, Belmont on the north) that drained into the Schuylkill. These natural features greatly restricted access to and from other parts of the fair. The shady, circuitous paths descending the

dells were attractive enough to young lovers but not to the average visitor with blistering soles. Said one observer: "A precipitous ravine draws an inappropriately abrupt frontier between the expositional domains of the farmer and the gardener." 30 The writer was referring to the physical separation of Agricultural Hall and Horticultural Hall.

Actually, a determined pedestrian could approach the gardener's domain from the west by a paved and level promenade of beautiful outdoor floral exhibits. But this walkway was easily a fifth of a mile in length. For those visitors who chose to ride as much as possible, the nearest train stop was at Agricultural Hall, on the north side of Belmont Dell (or Valley or Ravine, as it is variously labeled in maps of the day). 31 Encircling Agriculture's gothic cathedral, the narrow-gauge line came to within 600 feet of Horticultural Hall as the crow flies. Walking distance by footpaths through the gully or over an out-of-the-way bridge was almost twice as far and infinitely more wearisome.

A sylvan dell was not exactly the kind of location General Stone had envisioned for a mass transit exhibit keyed to modern urban life. But at least a good case could be made for its usefulness at this spot.

Here also was the site Philip J. Lauber, "one of the most popular and enterprising citizens of Philadelphia," 32 had chosen for his German restaurant. It was a most unfortunate choice of location with respect to Agricultural Hall, being even less accessible than its horticultural neighbor, farther from the ravine path, farther from the bridge. And across Belmont Dell, right beside the bridge, was its chief competitor, the American restaurant. Contemplating that long hike from the farmer's domain in store for lovers of sauerbraten and wiener-schnitzel, Herr Lauber might well have discovered within himself a deep solicitude for all foot-weary patrons.

The end result was an agreement among Stone, the management of the fair, and the West End Passenger Railway. The General's Elevated Railway would link the farmer's and the gardener's domains.

Like so many details of Stone's career, the precise terms of this arrangement are lost to us. But it is clear from the listing in the

official Centennial Commission report that the General was admitted to the fair as a concessionaire rather than as an exhibitor. At least nominally, it appears that his Elevated became a branch of the narrow-gauge service. This would be (as Cox remarks) the only operation of its kind in transportation history in which a horse tramway company ran a steam railroad which in turn had a monorail for a feeder line.

The Elevated’s right of way across Belmont Dell was short and direct. There were no loops, switches, turnouts or turntables. It extended in a straight line from brow to brow, just under 500 feet in length, including passenger platforms at either end. The ravine at this crossing had a depth of thirty-odd feet. The monorail truss rested basically on five masonry pillars, with foundations sunk into the bed and slopes of the gully. A Phoenix iron column stood on top of each pillar, supporting the bearing rail.

On either side of the dell, the Elevated Railway stopped about 200 feet short of the exhibition halls. The grounds on the north side were, and would remain, bare and colorless, but on the south side gardeners were preparing “a brilliant spread of turf, coleus and geraniums.” The north platform had for its nearest neighbor a small structure known as the Tea and Coffee Press Building. Here, a Mr. Jonathan Miller was getting ready to market his newly invented pressure-extractor, and also to sell coffee and iced-tea made by the patented process. The south platform brought happiness to the owner of the German restaurant, for it would unload passengers right alongside his beer garden.

Apparently none of the guidebooks published in advance of the Exhibition made mention of Stone’s Elevated Railway. Probably the project received official approval at the last possible moment, perhaps as late as the middle of April. It would be in keeping with the rest of Stone’s career for us to picture construction work on the elevated track

being rushed to completion, under the General's personal supervision, a matter of days before the May 10 opening of the fair.

It is almost certain that Stone put into service at Fairmount Park the same equipment he had demonstrated at Phoenixville. Unfortunately, the pictures and descriptions from Fairmount Park do not agree with one another in regard to the external appearance of the locomotive. A stereopticon photograph, which might have proved definitive, was aimed towards the rear of the coach, hence does not reveal the front of the engine. It is possible that Stone modified the engine's exterior during the six-month run of the fair.

The coach, which according to Kennedy was decorated a light cream color with light gray panels and mahogany window sashes, held sixty passengers. It was said that a round trip could be made in two minutes. On one leg of the trip, obviously, the engine had to travel in reverse, pushing rather than pulling the passenger car. The engineer was Adelbert Underwood, a resident of Cuba, New York. The one-way fare was three cents.

In a retrospective review of the fair, Bruce refers to Stone's invention condescendingly as "that time-honored or dishonored suppliant for public favor"; later, metaphorically, as a "shaky Al-Sirat." Yet by all other accounts, the Elevated Railway performed well at the fair. The report of the U.S. Centennial Commission states that it "proved a highly novel and attractive feature, much utilized by visitors." Ingram gives the same testimony, taking note also of the smooth performance of the rubber-tired guiding wheels. McCabe, though matter-of-fact, repeats the inventor's claim that this system was "cheaper to build, more economical to operate, and safer than any other elevated road in use." And Bayard Taylor, editor of the New York Tribune, recommends to his readers: "On the way out of the grounds ride across Belmont Glen on the elevated one-track railway."

Undoubtedly there was a day on which the Stone children were

34 Compare Gardner, op. cit., Plate J (Elevated in front of Agricultural Hall), with Wilson, op. cit., xcvii. Compare Kennedy watercolor with Dieterich poster.
35 Slide No. 1125, Views of the Centennial, in the collection of Historical Society of Pennsylvania. The scene itself is labeled, "2190 Elevated Railway, Centennial Grounds."
36 Johannsen MS. From Kennedy's note on the back of his drawing we learn the colors of the coach.
37 Bruce, 213. "Sirat: a bridge in Muslim eschatology which spans the chasm of hell and connects this world with paradise and over which according to tradition only the righteous can cross while the unrighteous fall to a flaming punishment." — Webster's 3rd New International Dictionary, 1961. Arabic: sirat, road. Also called al sirat. I find this symbol an apt one in view of Stone's later career.
Representation of General Stone's "Rapid Transit Elevated Railway" before it was built in Fairmount Park, c. winter-spring 1876. Original watercolor by David J. Kennedy in collection of Historical Society of Pennsylvania.
brought to the Exhibition and allowed to ride the monorail to their heart's content. It is charming to picture this scene in the imagination — Romaine, now eleven, Richmond, four, riding back and forth across the valley, delightedly — in the coach first, and then in the cab of the twin-stove locomotive.

It is less pleasing to conjecture on financial aspects of the General's exhibit. During its construction, in mid-April, Stone had had a discouraging realization. He read in the New York papers that actual construction work had begun on both the Third and Sixth Avenue elevateds. Each was being built in the conventional style. Even before the opening of the Exhibition, his idea had been decisively and forever rejected by the great metropolis.

There were, of course, other large cities in America with transit problems. During the summer months, Stone's hopes may have fed on inquiries of entrepreneurs from Boston, Chicago and Philadelphia itself. An improbable interest was shown by some oil men from McKean County, Pennsylvania. Stone knew that territory fairly well; it was rude timber country just across the state boundary, bordering on Cattaraugus County, and it needed rapid transit about as much as Cattaraugus County did.

We do not know what the revenue from fares amounted to in an average month, or whether it was sufficient to meet operating costs. But subsequent developments make it clear that the net return did not amortize Stone's investment. Far worse was the fact that, when the great Exhibition came to an end, the showing had not resulted in the adoption of his idea by any city. He now had to face the financial consequences.

At the height of that brilliant Centennial summer, the Roy Stone Company of Vandalia was forced to acknowledge its insolvency. Stone's creditors had ceased to share the inventor's hopes before the Exhibition was half over. It appears that the first steps of a bankruptcy began on July 20, 1876, when the assignment of his property deed to a trusteeship was signed by Stone and notarized in Philadelphia. On November 27, seventeen days after the close of the fair, the document was formally recorded by the Clerk of Cattaraugus County.38 On December 20, the monorail coach was sold "by Sheriff sale in Philadelphia . . . for $121.65." 19

[To be concluded]

38 Deeds, Liber 96, p. 626.
39 Kennedy’s inscription on reverse side of drawing.