



The Wrong Rail in the Wrong Place at the Wrong Time: The 1887 West Hartford Bridge Disaster

*'Twas the Montreal Express
It was speeding at its best;
Near Hartford Bridge it struck
a broken rail.
When down with a fearful crash
To the river it was dashed.
And few survived to tell the horrid tale.*
—Anon., from “The Hartford Wreck”
(in Joyce Cheney, comp., *We Tell Our Story: Vermont Songmakers and Their Songs*)

By J. A. FERGUSON

When Professor Robert Fletcher, the dean of Dartmouth College’s Thayer School of Engineering, got out of bed on February 5, 1887, he knew it was cold even by the standards of Hanover and those who had long lived in the Connecticut River valley. As was his daily habit, he duly noted in his diary the local weather: -15° F and clear skies.¹ Fletcher was soon warmly dressed, however, and marshaling three of his students, he crossed the Connecticut River and traveled by horse-drawn sleigh some eight to ten miles southwest, to the scene of a devastating conflagration, a horrendous bridge burning on the Central Vermont Railroad’s West Hartford bridge over the White River. Thirty-seven people perished in the fire when the

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TABLE 1 Estimated Distribution of Casualties, Feb. 5, 1887

	<i>Passengers</i>	<i>Crew</i>	<i>Total</i>
Killed	32	5	37
Injured	49	1	50
Uninjured	22	6	28
Total	103	12	115

derailed train plummeted onto the ice, fifty were injured and twenty eight escaped, but with the event's trauma to follow them the rest of their days. In all, 115 persons are counted in what was and is still today the worst railroad disaster in the history of Vermont railroading [Table 1 and Appendix].

The Boston-Montreal "Night Express," an hour and twenty minutes late out of White River Junction, finally left at 2:10 A.M. in the frigid early morning hours of February 5, 1887. The train had departed Boston Friday at 7:00 P.M. via Lowell and Lawrence, then proceeded north through Concord, N.H., with thirty-seven passengers, twelve in the sleeping car, probably two in the smoker car, a combination unit with the mail coach, and the rest in the single coach. The consist was made up of the engine "E.H. Baker," a 45-ton 4-4-0 and tender, plus a baggage car, the mail/smoker combination, a regular passenger coach, and the sleeper "Pilgrim." The Springfield (Ct.) train, starting out from New York City and behind schedule, would join with the Boston train at White River Junction; it left its station at 8:15 P.M., coming north along the Connecticut River valley, stopping at Windsor, the southern starting point of the original Vermont Central Railroad, now the Central Vermont Railroad. When joined with the Boston train, the Springfield coach and the sleeper "St. Albans" made up the new train, train #50. Thus two great eastern locales were represented for an eagerly anticipated trip to the metropolis of Montreal, host city of an upcoming week's *carnaval* that was to open the following Monday. The distribution and exact number of passengers may well and forever be in question, but of the 115 accounted for, twelve of whom were crew members, each sleeper was listed as carrying thirteen people including two porters, when the train arrived at White River Junction and before additional people boarded for the remaining part of the trip. Finally getting under way at 2:10 A.M., train #50 proceeded north and reached the West Hartford bridge, 4.2 miles away, at about 2:20 A.M., an average speed of about twenty-five miles per hour. The train was under orders to meet the southbound Montreal train at Randolph, "as usual."²

The passengers aboard the train that early February morning were an eclectic group. Henry Tewksbury, lawyer, Dartmouth alumnus, and noted lecturer, had the previous evening given a lecture in Windsor about the Gettysburg battle and was returning to his home in Randolph. Some twenty individuals were returning from New England to the Canadian provinces of Québec and Ontario, and the city of Montreal. New York City businessman Louis Combremont was on board for Montreal. Three Boulanger children, Bennie, Francis, and Anastasia, from Holyoke, Massachusetts, appear to have been traveling by themselves but may have been accompanied by David Maigret and his son Joseph, who were going from Holyoke to their home in Shawinigan, Québec. French names were common among the passengers, most of them coming from New England mill towns: Winooski, Nashua, Manchester, Lawrence, Chicopee Falls, and Lowell. Dartmouth student Edward Dillon from Springfield, Vermont, was on board with his college roommate, Alvin Veazey, son of a prominent Vermont juror and trustee of Dartmouth College. They were somewhat surprised to find the train at the station in the early morning hours and on the spur of the moment thought it a good idea to travel to Burlington. Annie Murphy and Katie Cahill, of Boston address, were bound for service in Burlington, in the employ of Mr. James Stone, also on board. Fred Tuttle of Tunbridge was on his way home, perhaps coming up from Windsor, one of the stops on his teamster route. One of the more well-known names was Frank Wesson of Springfield (Mass.), a member of the Wesson family of Smith & Wesson, the firearms manufacturer. Not everyone on board was asleep; although both sleepers were filled, people in the coaches were trying their best to get as comfortable as possible on the firm cushions. Now fully loaded, the sleeper "Pilgrim" had twenty-five occupants, including "five ladies"; and the other sleeper, "St. Albans," probably had the same approximate number.³ In the second coach at Bellows Falls were noted "7 ladies, 2 small boys and 18 men, making 27 in all"; with some of the men in the smoking car and other passengers in the other coach, the total of 103 passengers can be accounted for.

The porters had done their job well, the cast iron "Baker" stoves were laid with coal and stoked, providing as much heat as they could along the lengths of the uninsulated wooden cars. Whale oil and kerosene lamps flickered evenly for those who were still in need of illumination. In one of the coaches a four-handed game of whist was being played. Outside the temperature had fallen to -18° F. It was a cloudless night, fully lit by moonlight.

The crew that night was made up of experienced railroad personnel. The engineer was Charles H. Pierce of Hartford, an employee of the

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Central Vermont for twenty-two years, nine as engineer. With him in the cab was fireman Frank Thresher of St. Albans. The conductors of the train were Smith C. Sturtevant of St. Albans and M.R. Burgess of Boston. Edward Banks (or Brocklebanks) of West Lebanon, New Hampshire, and George H. Parker were brakemen. A.J. Hammer of Malden, Massachusetts, and J.H. Jones of Boston were the two porters. In the baggage car was Cole and in the mail/smoker were Perkins, Armington, and express messenger Robbins: twelve crew in all.

The Central Vermont tracks out of White River Junction closely follow the western side of the White River to the point where they take a more northward bend, requiring a 33° turn to the right (east) as the river crossing is approached. The bridge, entirely of wooden construction was known as a “deck bridge” and was 650 feet long with four major 145 foot spans, and a smaller sixty to seventy-foot span at the north abutment, crossing over the road below (Route 14). The distance from the top of the track to the ice-covered river below measured forty-two



West Hartford bridge crossing the White River.

feet, with the trusses themselves sixteen feet from the surface. On top of the wooden trusses was a layer of sheet iron, placed between the rails and ties and the supporting structure, an apron to deflect any sparks from the locomotive's belching smokestack. Ironically, what had been designed to protect the bridge from fire contributed to its ultimate demise.

In spite of the need to make up time due to the late departure and to meet the scheduled passing of the southbound Montreal express at Randolph, the engineer reported that he slowed the train in accordance with standard practice, making the crossing at about twelve miles per hour. The first indication that something was wrong was reported by Henry Tewksbury. There was a "swaying of the car back and forth, and a jolting, and I knew the wheels were running along the sleepers [ties]."⁴ He was with his friend, conductor Sturtevant, who had just returned to the coach after checking fares in the smoking section. They immediately pulled on the overhead cord attached to a bell in the engine, signaling engineer Pierce to make an emergency stop. Upon hearing the alarm Pierce looked to the rear of the train on his, or right, side and was startled to see the rearmost sleeper, "Pilgrim," teetering off the bridge and heading for the river below, dragging with it the adjacent sleeper "St. Albans" and the two coaches from the middle of the train. The coupling broke apart where it joined with the mail/smoker car, leaving the engine and tender, baggage car and mail/smoker unit intact on the bridge. Flames quickly erupted, enveloping the four coaches and like a flaming torch reaching to the bridge above. What was at first shock, disbelief, darkness, and confusion soon became an inferno visible for miles in the Vermont countryside. There had been no warning other than some vibration, a shudder, and no doubt the squeal of tortured metal, then the awful sense of tumbling into the space below. It all happened so quickly no alert other than the alarm bell was possible.

In the doomed coaches, scenes of death and escape were taking place. Dartmouth students Veazey and Dillon were cast out of their shared sleeping berth, Veazey only slightly injured, his roommate fatally pinned under debris. Mrs. W.S. Bryden, retired for the night in her sleeping berth, was barely able to be extricated through a broken window, only, she said, because she had practically no clothes on. That she survived in the bitter cold under the circumstances is a marvel of her determination and stamina, as well as a tribute to her rescuers. A father from Canada, probably David Maigret, was so pinned down in the wreck he was unable to get out, and gave his personal belongings, watch, and pocketbook to his young son and bade a tearful good-bye before the creeping wall of flames engulfed him. Conductor Sturtevant had taken

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a fare in one of the coaches and went down with it, suffering severe burns, a mangled shoulder and arm, and a crushed head. Death came mercifully the next day. Some passengers were identified by bits and remnants of clothing or personal gear; others, not at all. One of the most heart-rending remains was that of a parent and child fused together in a final poignant embrace, burned beyond immediate recognition.

The stunned crew members in the remaining units on the bridge reacted immediately to the catastrophic descent. Engineer Pierce, shovel and lantern in hand, with his fireman, Thresher, jumped from the cab and slid down the embankment to the broken heaps of the four coaches. Brakeman George Parker, who was on the second coach, had correctly assessed the vibrations and jolting and leaped from the coach before it went over, sliding down the bank at the south abutment. He then took a team from a nearby house and brought the alarm to the White River Junction station and the community. In no time fires started in the demolished wooden coaches. Pierce shoveled snow in a vain attempt to put out the flames, but they were increasing at a faster rate than his efforts could overcome. His next action was to break windows to get



West Hartford bridge train wreck, February 5, 1887; view from south abutment. Photo by H.H.H. Langill, courtesy of Rauner Special Collections, Dartmouth College Library.

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survivors out of the flaming wreckage; eight made it out thanks to his efforts. This was most likely the Boston coach, the unit nearest to the mail coach, and was probably the first in line that he came to. Conductor Sturtevant was in this coach, clothes ablaze, and Pierce tried to douse the flames by showering him with snow. Henry Tewksbury was also in that coach and was luckier; he got out, but with difficulty and with injuries he suffered from for the rest of his days. Others were not so fortunate; there was “darkness and confusion,”⁵ the smoke was “dense and the fire burned rapidly.”⁶ No sounds came from the stricken coach as Pierce and Thresher continued their efforts. At the other end of the piled-up coaches, or what was left of them, the two mail agents, Armington and Perkins, and the express messenger, Robbins, worked with baggage master Cole to extricate passengers, some of whom pitched in to do what they could. By now the flames were clearly threatening the bridge, so Pierce had Thresher move the engine and remaining cars forward and well clear of the bridge. From the moment of derailment, toppling off the bridge and onto the frozen river and with flames reaching upward to the wooden lattice-style bridge, no more



West Hartford bridge train wreck, February 5, 1887; view towards south abutment. Photo by H.H.H. Langill, courtesy of Rauner Special Collections, Dartmouth College Library.

than twenty to thirty minutes had elapsed. Thirty-seven people were to die, including five of the train crew; fifty were injured and twenty-eight escaped with minor injuries or were otherwise physically unharmed.

Two buildings stood at the ends of the bridge: the Pingree house at the southern end and the Paine farm at the northern end and on the right (east) side of the track. Both immediately became hospitals, refuges, recovery rooms, and morgues. The crushing and maiming of crew and passengers, adults and children, was horrible in itself; but the outside temperature, approaching -20° F, presented the additional threat of frostbite and hypothermia and dictated that rescue efforts be made as quickly as possible. Those able to exit their sleeping berths were likely to be very thinly clad, some with nothing on but night clothes. The injured and dying were stretched out on floors in all and any rooms, “kitchen, sitting room and parlor, bedroom and two large upper rooms to the number of fifty or more.”⁷ The response from White River Junction, a relief train with physicians, wrecking tools, and volunteers, was soon underway.

Some of the people in the Paine house who were not injured or slightly so boarded the train and continued their trips to Montpelier, St. Albans, and Montreal. Engineer Pierce pulled away with the baggage and mail sections at 8:30 that same morning. He estimated that five or six passengers were on board,⁸ but D. Roy counted “about a dozen” names on the conductor’s list, including Jacques, Beauregard, and Lacaillade.⁹ Euclide Chagnon of Manchester, New Hampshire, was quick to escape the turmoil, so quick that he was listed among the missing and unidentifiable dead, and a friend from Manchester was dispatched to collect his remains. A telegraph from Montreal later confirmed that he arrived there Sunday evening in good health. The same occurred to Charles C. Domett of New York (or Boston). Barely escaping with his life from the sleeper “St. Albans,” he claimed he “went over to St. Albans” and refitted himself with clothing. He, too, had been listed among the dead, not because of a body count but because he wasn’t around to be otherwise accounted for. Upon his return to the White River Junction hotel, he collected his watch and money that had been picked up and was eager to continue on to Montreal. The same can be said of Dr. C. F. Clark, who telegraphed his family that he was safely in Montreal. These three were representative of others who, uninjured, thought their best plan of action was to avail themselves of an offered route out of the valley on the northbound mail train and put behind them as quickly as possible the traumatizing aspects of the situation.¹⁰ Sunday, the day following the tragedy, saw throngs of onlookers swarm to the scene, some searching for relatives or friends, others

to aid in the grisly job of picking over remains, and others souvenir hunting or just gawking at the burned-out residue of what had been four proud coaches of the popular Central Vermont.

THE INVESTIGATION

An investigation by the Vermont Railway Commission, headed by Lt. Governor Levi K. Fuller, formally started Monday afternoon at the Junction House in White River Junction. Other commission members were Senator Henry L. Clark, a lawyer from Rutland; Col. T.C. Fletcher of St. Johnsbury,¹¹ a well-to-do merchant; and chairman Samuel Pingree, ex-governor (1884–86) of Vermont. In attendance at the investigation were C.W. Witters and Guy C. Noble, attorneys representing the interests of the Central Vermont; A.E. Watson was secretary. CVRR President J. Gregory Smith and his brother, Worthington C. Smith, were also present. The focus of the investigation started out questioning the condition of the track, as there was some evidence that the cause of the derailment might have been a fracture in one of the rails. Trackman Clarence Hutchinson testified that his job as trackman was to walk a section of the railway that included the accident site. This he did between the hours of 7:30 and 11:00 P.M. with a lantern, walking in one direction examining one rail and returning over the same section checking the other, “looking for defects, *especially on curves.*”¹² He passed the point of rail failure at 10:30 P.M. that subzero Friday night, four hours prior to the accident, noting no defects. He added that he thought a freight train had passed over those same rails between the time of his inspection and the accident.

Lewis Benjamin, section foreman, corroborating Hutchinson’s testimony, said “we have always been extra careful in our inspections of *curves and bridges*¹³ and was quick to note that never had a track walker failed to do his duty. Another section hand, Charles Sturtevant, swore he had passed over the bridge that day (Friday) and saw no defects. He was one of the track crew who replaced rail after the accident. He described the broken rail by noting that “the ball of the rail was broken off, and the shoulder was about half broken off.”¹⁴ If there were other pieces of track lying about, he did not notice them.

Roadmaster A.C. Bean, who served fourteen years in that capacity out of the twenty he had been employed by the Central Vermont, testified about the direct aid he supervised to the suffering victims and the additional equipment he had ordered brought up from the station. He gave a more detailed description of the track: He saw three rails torn out of position, some bent, the first rail broken off nineteen feet, seven inches from the south end, the whole length of rail being thirty feet.

The rails, he noted, had been rolled at the St. Albans foundry from blooms of Bessemer steel bought from Germany and had been laid five years earlier.¹⁵

Roadmaster Bean's testimony and analysis speak well for him as an experienced railroad man. His detailed observations and conclusions cannot be disputed. He found two or three breaks in the rails and could not say which occurred first. The marks made by the wheels indicated that one truck, a forward set, had derailed, but he considered that both pair had derailed before reaching the south abutment. It was the last car of the train, the sleeper "Pilgrim" from Boston, that precipitated the chain reaction, its axle neatly sheared at mid length causing a skewed tracking and subsequent rotation and tumbling to the right off the bridge. While all of the coaches went off the right, or east, side of the bridge, one of the trucks and axle was ejected on the opposite, or west, side of the bridge; it showed no signs of having been subjected to fire.

Following Bean's testimony, the panel heard from Mr. Mulligan, the superintendent of the Connecticut River road, and he didn't mince his words. His detailed observation of the rails and axle noted pertinent distances of the various truck parts that were scattered and thrown about by the break-up. He was of the opinion that the broken axle was the cause of the accident and caused the rails to fracture. He did allow, however, that the rails were defective as well. Both men were of the opinion that the defects in the rails were not noticeable by visual inspection.¹⁶ As to why the rails were defective, no qualified technical opinion was proffered other than that "slag" was probably included at the time of rolling. This is a likely explanation, and it could be added that the temperature of the alloy at the time of rolling is critical, as well as the speed at which it is done. The proper integrity and modulus of the steel section are governed by these factors, and any compromise on them results in brittleness. These factors, coupled with the extremely low temperature, -18° to -20° F, and with the stress of the wheels on the rails due to the curve in the tracks as it approached the bridge, made up a collection of conditions that spelled trouble for the Montreal-bound night express. Had there been no turn or side thrust on the rails and journals, it is likely the accident would not have happened. It was the wrong rail in the wrong place at the wrong time.

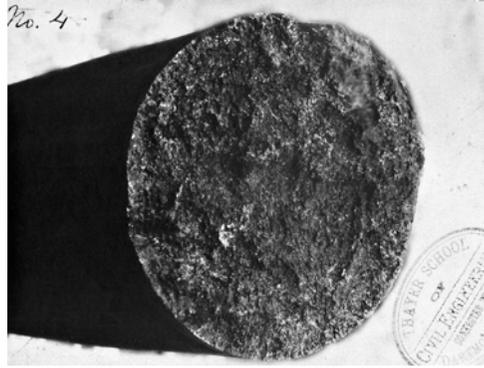
It didn't take long for the magnitude of the disaster to catch the attention of the media, especially the metropolises on the east coast. *The New York Tribune* quickly contacted Professor Fletcher at Dartmouth College, a recognized and respected authority on civil engineering matters, especially bridges. Fletcher, at the accident site early that very cold



*Professor Robert Fletcher
(undated). Courtesy of
Rauner Special Collections,
Dartmouth College Library.*

Saturday and accompanied by three of his students, examined the track and “got pieces of broken rails,” which he brought back to Hanover.¹⁷ He was also contacted at this time by *Engineering News*, a publication issued to professionals in engineering. The magazine’s purpose was to keep abreast of the latest happenings in the field of technology. At their behest Fletcher returned to the site on Monday, the 7th, accompanied again by three students and photographer H.H.H. Langill of Hanover, who took photos of the broken axle and the split rail as well as some outstanding shots of the devastated scene. He deserves credit for his zeal to accurately record scenes that might otherwise never be known. Along with a detailed sketch of the rails, noting where the break occurred, Fletcher sent his report and prints of Langill’s photos to *Engineering News* the next day. He tersely noted all of his activities in his diary alongside his other daily activities, typically noting how many hours he had worked on Thayer School matters as well.¹⁸

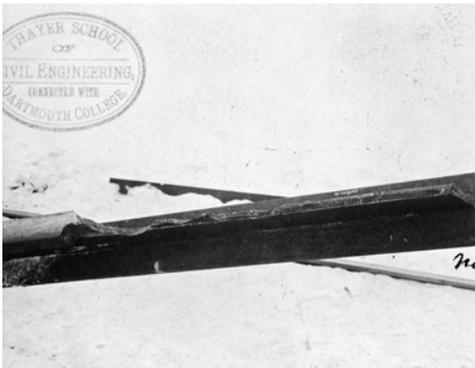
While Fletcher was independently analyzing the accident scene, making a sketch, and supervising Langill taking photographs of the available evidence, the Vermont Railway Commission continued their investigation in White River Junction, getting to the best of their ability first-hand accounts by those who were on the scene at the time of the disaster, those crewmen who came after to replace and repair the damage, and those who, while not present at the accident, were deemed qualified to give their opinion on what might have happened. These



Broken axle. Photo by H.H.H. Langill, courtesy of Rauner Special Collections, Dartmouth College Library.

witnesses were all railroad men whose aggregate years of experience no doubt was impressive and their testimony credible. Nevertheless, Professor Fletcher's presence did not go unnoticed, and commission members Senator Clark and Col. Fletcher (no relation to Robert) made a call to him "after breakfast" on Wednesday the 9th to "get my view as to the broken rails."¹⁹ Here was a non-railroad source of knowledge and one whose opinion carried weight. Fletcher obliged the commission by again testifying "After dinner" that very day and, accompanied by two students, he went again by train to the scene of the tragedy. Time logged in his diary for that effort: "3-6:15 P.M."

The testimonies of Bean and Mulligan notwithstanding, Fletcher's fact findings are noteworthy. His report, "The facts in Regard to the Woodstock Disaster," prepared at the request of *Engineering News*, sums up succinctly what happened and why. The article is dated February 8, 1887, only three days after the calamity. Fletcher laid out the



Broken rail. Photo by H.H.H. Langill, courtesy of Rauner Special Collections, Dartmouth College Library.



Slag seam. Photo by H.H.H. Langill, courtesy of Rauner Special Collections, Dartmouth College Library.

scene, described the consist, and its departure, the dimensions and construction of the bridge, and using the newspaper reports, the occurrence as recounted by the engineer and crew. Arriving at the scene by noon that day, he was no doubt surprised to see that the (defective) inside rail had already been replaced, no small feat in light of the chaos and sub-freezing temperature. He found several broken rail fragments lying about the track and, not one to make a hasty judgment, he opined that they might be a result of the accident *or* maybe a result of that morning's re-laying of track by the section hands. In any case he had Langill take photos of them, which clearly showed the breaks. In every fragment he examined he found flaws, and he concluded that the steel's strength had been reduced by 50 to 75 percent. One rail was marked "St. Albans 1881," a product of the St. Albans Foundry (*Engineering News* editors pointed out that the blooms, or steel ingots, were of German manufacture). Apparently there was not full agreement among the principals about the rail breaks. Fletcher leaned toward there being "at least two, and perhaps more, as broken." Not all of the stressed ("slightly bent") rails were replaced. Summing up, Fletcher ended his report by leaving the door open as "to learn[ing] the determining cause of the disaster," but he then committed to "the failure of a rail about 450 feet from the end of the bridge as the beginning."²⁰ His conclusions about the failure of the steel member fell short of any condemnation, in contrast with the opinions of Mulligan and Todd of the Boston and Lowell. A letter to Central Vermont's general manager, J.W. Hobart, provided insight to Fletcher's position in the matter: "I was there for scientific inquiry as to *facts*, not to talk *theory*."²¹

In the astonishingly short time of two days following the accident, reconstruction had been started on the bridge, and in less than a week

125 men were involved in setting up the trestle “in drizzling rain . . . (and) half snow.”²² Central Vermont had not only started repairs on the tracks, initiated steps to rebuild the bridge, and devised a schedule of shunting traffic out of White River Junction northward via the Passumpsic and Wells River road, but it had carried out an inquiry that did not seem to generate a broad spectrum of opinion as to what had caused the wreck or to whom blame might be ascribed. The Central Vermont was no doubt relieved to find that the professor from Dartmouth did not provoke further and controversial dialogue; he was asked his opinion, he gave it, and that was that. Outside of making a rebuttal to a *Boston Globe* article that misquoted him,²³ he had no further involvement with the disaster until two years later, when he obliged the principals by testifying as a witness for the Central Vermont at court in Burlington.²⁴

The history of the Central Vermont includes other accidents, ranging from mishaps to those involving fatalities. Twenty years earlier in Northfield, the wooden Harlow bridge had caught fire and was completely consumed. When its replacement was under construction, the crew were being transported back to the work site and the engineer failed to stop; the train fell seventy feet into the Dog River below. Fifteen were killed and injured. Less than two weeks after the West Hartford disaster, Montpelier Junction was the scene of an unexplained head-on collision between a Northfield-bound freight and train #58 headed north. No fatalities or serious injuries were reported, the crews jumping before impact. A crew of engineer and fireman were killed near Rockingham the following year due to a track washout. In Bethel two months later, a wood train, while loading, was smashed in the rear by a cattle train, killing one person immediately. January of 1889 saw a near replication of the 1887 tragedy as a freight crossing the Hartford bridge broke an axle on the engine about halfway across, causing the truck to strike a siding switch at the end of the bridge, opening the points, and forcing the train onto the siding, a relic of the construction of the new bridge that replaced the one of the previous disaster. It was a short siding: The train, unable to stop, careened off the end of the siding and down a twenty-foot fill. The first eight cars piled up on the engine but the engineer and fireman were able to leap to safety. On May 4, 1889, a freight broke into two sections at East Granville, derailling twenty-one cars and scattering hogs into the nearby woods. On May 29 a freight broke in two at Highgate Springs, seriously injuring a brakeman.

Once the cause of the West Hartford accident had been determined and agreed upon by most of the principals, the public outcry focused on the consequences: Why the unfortunate victims had burned alive in the

worst cases and were probably scarred for life in other cases. The question naturally arose as to why lit candles and coal-fired stoves were the source of heat and illumination when electricity was available, as was steam from the engine. Central Vermont president J. Gregory Smith apologized for the lack of technical advancements with regard to heating and lighting and professed that if there were better sources than the 300° whale oil candles and coal stoves the Central Vermont used, he would be the first to install them on his line. This statement, printed by the Springfield (Vt.) *Union* sounded like a whitewash of wishful thinking or weak hindsight as Smith explained that they had tried just about everything and had not been able to find a better system than whale oil and coal.²⁵

Smith's somewhat pallid defense was assailed from many quarters. The Vermont Railroad Commission in their first Biennial Report of December 1, 1886 to June 30, 1888, summarized the findings about the tragedy and noted that "many who lost their lives in the accident would have been saved if it had not been for the stoves and lights in the wrecked cars," and concluded with the somewhat fuzzy recommendation that something should be done about the heating and lighting inadequacies.²⁶ The *Valley News* was to note many years later (June 13, 1985): "By 1887. . . several railroads used electric lighting in place of kerosene or oil lamps. Many railroads also used steam from the engines to heat the cars. The means for preventing fires after train wrecks were available." The paper further indicated that safety measures on that night express were uncommon and broadly hinted that safety had been sacrificed for economy. Other papers pointed out that "Electricity had been in use by other railroads since 1882,"²⁷ and in fact, as early as October 1881 saw the first use of electric illumination in a Pullman coach, in England, that was powered by a somewhat clumsy French-designed battery.

THE AFTERMATH

Litigation inevitably followed the disaster. As soon as the shock and media coverage subsided the cases against CVRR began to proliferate. They sprang up in several county courts, with CVRR facing as many as seven (known) suits at the same time. Precedent in law is like a guiding light in legal proceedings: It sets an example or standard on which arguments can be based, juries influenced, and decisions rendered. The attorneys for CVRR were quick to establish their position early in their defense, no doubt anticipating suits soon to be on various court dockets. Unfortunate as the various plaintiffs' sufferings may have been, CVRR was quick to establish their defense: CVRR was not negligent in operating a railroad for the use and benefit of the public.

One of the first cases was heard in Chittenden County Court in Burlington, in September 1887. The plaintiff was John E. Lavelle, administrator of the estate of James A. Stone of Burlington, killed. Stone, a veteran of the Civil War, who received a pension for wounds he got during the conflict, left a widow and four minor children. He was proprietor of a hotel in Burlington and earned his living from that business, letting rooms and selling meals, and, pointed out by the defense, alcohol. Stone was fifty years old and not in the best of health, such that the defense lawyers brought to the stand his personal physician who, oddly, was also on the payroll of CVRR as company physician. He testified that Stone had cirrhosis of the liver and could not have expected to live beyond one year. Stone's friends and associates, as well as his wife, denied there was any ailment, and insisted that he seemed to them normal in every respect.

The trial was in continuance in September 1887, further delayed by defense demurrers in both April and in September 1888,²⁸ once again demurred and postponed to the following April 1889 session, and even once more when postponement was again requested in May 1889. The eventual date for commencement was finally established as April 29, 1889.²⁹ Despite defense maneuvers to further postpone the trial, the suit was opened on May 14, 1889, with closing arguments in June. The plaintiff sought \$30,000 for the benefit of the widow and four children. The defense countered that the "pecuniary loss of the family was nothing."³⁰ The jury of ten farmers, a painter, and a hardware merchant decided for the plaintiff in the amount of \$5,000 and costs.³¹ While it would seem that the amount even in 1889 was not a huge sum to be awarded, the lawyers for CVRR would not abide by it and petitioned the Vermont Supreme Court to hear an appeal based on their multiple exceptions. It was clear that in this opening case the CVRR legal team was playing hardball, reflecting the harsh business attitude typical of the front office. The case was entered on the Supreme Court docket and was on continuance in January 1890.³² Up to this point the opening trial against CVRR had taken over two years and settlement was not yet determined. The whereabouts of the records and files of the *J.E. Lavelle v. CVRR* remain an open question.

The Supreme Court was to be the venue of other suits against CVRR stemming from the 1887 bridge disaster. The case of William Devino of Winooski was brought against the railroad for \$30,000, seeking damages for the loss of Devino's wife, Mary Emma. The suit originated in the same Chittenden County court as the Lavelle case and, like it, was delayed by continuance in September and upon demurrer in October 1889.³³ It seems that Mrs. Devino was a wife to Mr. Devino in the

common-law sense and that provided the defense with a point of contention that the next of kin or rightful heirs stood first in line to receive consideration in settling her estate; this was another valid legal point that served for delay. In January 1890, the case was finally brought before the Supreme Court where it was further continued.³⁴ The Court did reach a decision, favoring the plaintiff, and remanded the case to the lower court with “leave to re-plead.”³⁵ Court records for the final settlement have not been located.

The case of W.F. Dillon, administrator for the estate of his son, Edward F. Dillon, killed in the accident, was in contrast a relatively quick settlement. W.F. Dillon was a wealthy woolen manufacturer from Springfield and his legal representative in the case was P.M. Meldon, a respected and experienced juror from Rutland. Suit was brought before the Windsor County Court in Woodstock and apparently was settled out of court by June 1889.³⁶ Terms of the agreement are not known as records of the trial are not available.

The case of *Westcott v. CVRR* was brought by Addie C. Westcott, administrator for the estate of her late husband, Samuel, and their ten year-old son, Eddie, both of whom perished in the conflagration. The jury was “struck” for the trial in September 1889, but due to a conflicting trial CVRR was defending with another plaintiff stemming from the same incident but in another court jurisdiction, both parties agreed to a postponement.³⁷ In an unsurprising move, CVRR’s attorney, Henry Ballard, suggested the jury be excused—indefinitely. The case was put over until October, at which time the jury was excused.³⁸ In February 1890 the jury was struck again,³⁹ and settlement was reached by April 23, 1890. For the loss of husband and child, widow Westcott was awarded \$5,200.⁴⁰

Henry Mott, of Alburgh, was well known to CVRR and was considered a favored customer. As a dealer in agricultural products he used the CVRR freight services to transport his merchandise to southern New England customers. As such, he was given a regular pass to ride the CVRR sections; he was compelled during his travel on the train that night of February 5, 1887. He had boarded the train in Bellows Falls and soon retired to his berth in the sleeper “St. Albans” and next woke up in an unfamiliar room in a White River Junction hotel, having been struck unconscious by the crashing sleeper, and, lucky to be alive, had no recollection of any of the tragic details.⁴¹ His injuries, though not life threatening, were painful and, he later claimed, prevented him from going about his daily duties. His suit was brought before the Grand Isle County Court in North Hero and closed September 30, 1889, after four weeks of trial. The jury found in favor of the plaintiff 7–5 in what was

reported to have been a “warmly contested” suit.⁴² This apparently was not the end of the case and a retrial and change of venue was indicated. Further trial data and files have not been found.

Henry Tewksbury of Randolph was not one to be ignored under any circumstances. An attorney by training, he had foregone a practice in law to become a lecturer, notably about the Civil War but also about other issues that he deemed might be of public interest. It was just by chance that he happened to be on the ill-fated train that early February morning. He had planned to stay over at White River Junction after lecturing that evening in Windsor, but could not find a room available so opted for the short ride up the valley to Randolph. Not being shy about court proceedings where it involved CVRR, Tewksbury sued for \$80,000 and claimed for the rest of his days that he was severely disabled by the wreck. At several of the hearings and trials involving the bridge disaster Tewksbury was a star witness and seemed to enjoy being in the spotlight as a survivor of the incident. His case opened in May 1889 in a Boston court, then went to the Vermont Supreme Court and was withdrawn by October of that same year, perhaps indicating an out-of-court settlement. Because court records are not available, the results are not known. Henry Winslow Tewksbury died January 4, 1903, in Brattleboro after a period of failing health; he was 56 years and 7 months of age.

The eventual cost to CVRR, when “out of the woods” (April 1890),⁴³ i.e., all claims settled against it relative to the Hartford bridge disaster of February 5, 1887, will never be known. The records of the court trials are in disarray and the records of CVRR have been destroyed, lost, or, more likely, discarded. What is known is that the railroad continued to function, not profitably perhaps, but despite apparently not having any meaningful insurance coverage between 1889 and 1892 and significantly higher legal costs, the railroad added revenue miles, and net income from operations showed an increase [Table 2]. The eventual contraction of net corporate profits was the result of the lack of dollars coming from the leased roads, rental obligations, and interest owed, plunging the line into bankruptcy.⁴⁴ During the period 1887 to 1890, CVRR was faced with multiple court cases, not all of which were related to the Hartford bridge disaster. It’s little wonder that the delaying tactic was a prime strategy. The legal team of Witters, Noble, Farrington and Ballard, under the watchful eye of J. Gregory Smith, worked overtime and endlessly in the interest of their employer. Guy C. Noble, one of the point men in the legal battles, succumbed, unexpectedly, during the legal turmoil.

The bridge at the West Hartford crossing of the White River, sometimes referred to as the Woodstock bridge, was completely rebuilt the

TABLE 2 Statement of Central Vermont Railroad Company

	1887	1888	1889	1890	1891	1892
Total income	\$2,535,276	2,649,169	2,732,621	3,090,473	2,923,854	3,093,636
Total expense	\$1,861,187	1,956,036	1,913,534	2,285,864	2,172,064	2,189,162
Net						
(operation)	\$674,088	693,133	819,087	804,608	751,789	904,474
Net income	\$15,088	34,133	19,933	11,951	100,007	<152>
Officers'						
salaries	\$86,045	93,529	110,252	115,657	120,811	132,192
Legal expense	\$14,042	5,754	30,456	33,377	19,971	16,203
Insurance	\$2,129	5,708	19,078	1,597	1,673	11,969
Total revenue						
mileage*	\$2,186,246	2,865,127	2,457,220	3,005,610	2,765,275	3,060,741
Employees	2,094	2,431	2,366	2,698	2,701	2,701

Source: Annual Reports of CVRR Co., 1887–1892.

*Fares (dollars) \times miles traveled.

following year by the Vermont Construction Company of St. Albans, using modern steel construction: “riveted lattice . . . of a hundred and fifty [foot] spans,” as well as improved approach, lending some credibility to the troubled railroad’s image. Sparked by the accident’s tragedy, railroad companies began to replace coal stoves and candles with the newly developed electric light systems and steam heat generated by the engine. In November 1887, the Canadian Atlantic Railroad introduced electric lighting aboard their trains and commenced heating their coaches from engine-generated steam—the first railroad in Canada to do so. The Pullman Ltd. Express of England installed electric lighting the following year. Two years after the accident, the first axle generator was installed on an American train, and in 1890 the *New York Times* reported the use of a self-contained electric battery, called a “plant.” Pullman introduced the first all-steel coaches in 1908, further reducing the threat of fire. Central Vermont, in 1889, fairly gloated with its introduction and announcement of its latest investment, a new style Wagner Vestibule car that “has in every part the latest and most improved appliances and invention,” and that those who would ride the new coach “will appreciate its artistic beauty as well as find comforts in its arrangements.” Those who toured the car, in Boston, were hosted and “entertained” by T.H. Hanley, the “genial ticket agent.”⁴⁵

That CVRR played a role in the development of railroad safety cannot be denied, albeit reluctantly and with a somewhat dubious credit to its history. As with many similar events, the disaster for which it must take a measure of responsibility did enable the creation of

higher industry standards. By 1893, six years after the Central Vermont disaster at the West Hartford bridge, Congress passed the Railway Appliance Act, establishing national safety standards for railroads.

APPENDIX

Hartford Bridge Disaster—Uninjured Survivors

Passengers (22) **Crew (6)**

Armington, mail agent

Bouciquet, Mr., Attawaugan, Ct.

Bouciquet, Mrs., Attawaugan, Ct.

Bouciquet, child, Attawaugan, Ct.

Bouciquet, child, Attawaugan, Ct.

Bouciquet, sister of Mr., Attawaugan, Ct.

Brigham, Herbert, Bakersfield

Butler, W.S., New York

Chagnon, Euclide, Manchester, N.H.

Clark, Dr. C.F., Laconia N.H.

Cole, A. B., baggage master

Curran, Major James

Desilets, Ben, St. Albans

Domett, Charles, C.

Duvelle, Mr., Chicopee, Ma.

Farwell, A.D.

Ferguson, Mary Stuart (Stewart), Inverness, P.Q.

Haggerty, William, Providence, R.I.

Hall, Charles, Boston

Halloway, William, NYC

Lee, W.H., Burlington

Lord, Frank, Great Falls, N.H.

Maigret (Maiquete), Joseph (son of D. Maigret)

Perkins, Moses, postal clerk

Pierce, Charles H. (or E.), engineer

Robbins, Alfred S., Manchester, N.H., express messenger

Rousseau, Napoleon, Montreal

Thresher, Frank H., St. Albans, fireman

Hartford Bridge Disaster—Listed As Injured

Passengers (49) **Crew (1)**

Alexander, J., Boston

Arel, Polly, Chicopee Falls, Ma.

Beauregard, Joseph, Montreal

Boisvert, O.S., Ste. Angeline, P.Q.

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Boisvert, Mrs. O., Angeline, P.Q.
 Boulanger, Bennie, Holyoke, Ma.
 Bryden (Beyden), Mrs. W.S., Montreal
 Cahill (Kahill), Katie, Boston
 Casey, W.C.
 Casey, Mrs. W.C.
 Combremont (Conbrement), Louis, New York, N.Y.
 Costello, Mrs., Boston
 Cushing (Cushman), J.H., Middleboro, Ma.
 Devino (Devenaux, Devineau, Devine), William, H. Jr., Winooski
 Follet (Falett, Follett), Mrs. Persis H., Sharon
 Fisher, Fred A., Gloucester, Ma.
 Genette (Jeanette, Gennett, Jeanville), Joseph, Scotia, N.Y.
 Graham, Mrs. John (Mary E. or J.), Bedford, Ma.
 Hosmer, Charles M., Lowell, Ma.
 Howe, George, Montreal
 Hibbard (Hubbard, Hebbard), Charles A., Cambridge, Ma.
 Hutchins, Julius C., Montgomery
 Jacques, Joseph, Fitchburg
 Juneau, Horace, E. Pepperill, Ma.
 Kastner (Castner), Mrs. Charles, Boston
 Kiley (Kilbey), J. E., Burke, N.Y.
 Lacaille (Lacard), Michael (Mitchell), Lawrence, Ma.
 Lavalley (Laville, Lavelle), Alex, Greenfield, Ma.
 Lebeuf (Lebouef), August, Lynn, Ma.
 Libby (Sibley), James, St. Valere, P.Q.
 Lovell, Emily (Emma) O., Montreal
 Lowe (Law), George, Montreal
 Maigret, Clovis (Joseph), Shawinigan (Schanigen), P.Q.
 Mills (brother of Cephas, killed)
 Morse, Mr., Springfield, Ma.
 Mott, Henry, Alburgh
 Murphy, Annie (Anna), Boston
Parker, George H., Charlestown, N.H., brakeman
 Pratt, Frank M., Springfield, Ma.
 Prue (Prew), David N., Providence, R.I.
 Remillard (Remilard), David, Brocton, Ma.
 Sadler, Marie (Maria), Ormstown, P.Q.
 Smith, Howard (Horace.), Gloucester, Ma.
 Sult (Shull, Sutt), J.S., New Haven, Ct. (Salem, N.J.)
 Tewksbury, Henry W., W. Randolph
 Tuttle, Fred W., Tunbridge

Veazey, Alvin B., Rutland
 Welch (Walsh, Wisch), Mrs. Margaret, Greenfield, Ma.
 Wheeler, Andrew, Fitchburg, Ma.
 Wilcox, H.G. (H.J.), Malone (Bangor), N.Y.

Hartford Bridge Disaster—Listed As Killed

Passengers (32) **Crew (5)**
 Bell, George J., Bellows Falls
 Blair (Blais), Peter, Warren Ma.
 Blair (Blais), Fred, Warren, Ma.
 Blaisdell, Mrs. Edward, Fitchburg, Ma.
 Boulanger (Bellinger), Francis, Holyoke, Ma.
 Boulanger (Bellinger), Anastasia, Holyoke, Ma.
Brocklebanks (Banks) Edward, brakeman, West Lebanon, N.H.
 Brodeur, Selma (Delima), Nashua, N.H.
 Brooks, Harry, Boston
Burgess, M.R., Boston, conductor
 Cadieux (Daieux), Charles, Rockville, Ct.
 Cassens (Cassino), Mr.
 Devino (Devineau, Deveraux), Mary Emma (Mrs. William H.)
 Winooski
 Dillon, Edward Frank, Springfield, Vt.
 Dunbar, Miss Nancy, Somerville, Ma.
 Flynn, Francis, Worcester, Ma.
 Guirard, Armine, Lawrence, Ma./Upton, P.Q.
Hammer (Hadden, Hammond), John A., Malden, Ma., porter
 James, Lewis (Louis) B., New Haven, Ct.
Jones, J.H., Boston, porter
 Maigret (Meigret, Marquete), David (Dieudonné), Schawiningan, P.Q.
 Marr, David, Providence, R.I.
 McDonald, Daniel, Lowell, Ma.
 McLane (McLain), Peter, Acton (Actonville), P.Q.
 Mills, Mason (Cephas), Iroquois, Ont.
 Pouliot (Poeloet, Poulet, Poullier), Moses, P.Q.
 Riggs, Homer, Middlebury
 Rogers, Agnes, Monroe, N.H./Lakefield, P.Q.
 Sanford, Charles W., Boston
 Stone, James A., Burlington
Sturtevant, Smith C., St. Albans, conductor
 Thayer, Herbert A., Chateaugay, N.Y.
 Westcott, Samuel S., Burlington
 Westcott, Eddie, son of S.S. Westcott

Wesson, Frank L., Springfield, Ma.
 Wilder, Edgar, St. Albans
 Woodard (Woodward), D.D., Waterbury

NOTES

¹Diary of Professor Robert Fletcher, 5 February 1887, courtesy of Rauner Special Collections, Dartmouth College Library.

²“First Biennial Report of the Railroad Commissioners of the State of Vermont, December 1, 1886 to June 30, 1888” (Boston: Rand Avery Co., 1888), 91.

³*Philadelphia Inquirer*, 7 February 1887, 1.

⁴*Valley News* [Windsor, Vt.], 13 June 1985, 1–2. A *Valley News* rewrite of the incident.

⁵*Daily American* [Lawrence, Mass.], 7 February 1887.

⁶*St. Albans Daily Messenger*, 7 February 1887, 1.

⁷*Ibid.*

⁸*Boston Daily Globe*, 8 February 1887, 2.

⁹*Manchester Union*, 7 February 1887 (from one o’clock edition of 5 Feb. 1887).

¹⁰*Boston Daily Globe*, 8 February 1887, 1.

¹¹Col. T. C. (Thomas Chittenden) Fletcher, of St. Johnsbury, was the son of Col. Frederick Fletcher, a neighbor and friend of W. Seward Webb, son-in-law of William H. Vanderbilt, owner of the Rutland Railroad and a friend of J. Gregory Smith, president of CVRR.

¹²*Manchester Union* (morning edition), 9 February 1887, 1, italics added.

¹³*Ibid.*, italics added.

¹⁴*St. Albans Daily Messenger*, 9 February 1887, 1.

¹⁵*Manchester Union* (morning) 9 February 1887, 1.

¹⁶*St. Albans Daily Messenger*, 9 February 1887, 1.

¹⁷Fletcher diary, 5 February 1887.

¹⁸*Ibid.*, 8 February 1887.

¹⁹*Ibid.*, 9 February 1887.

²⁰Robert Fletcher, “The Facts in Regard to the Woodstock Disaster,” *Engineering News*, 12 February 1887, 106. Courtesy of Dartmouth College Library.

²¹*St. Albans Daily Messenger*, 11 February 1887.

²²*Manchester Union* (morning edition), 11 February 1887.

²³*St. Albans Daily Messenger*, 11 February 1887.

²⁴Robert Fletcher, “Memorandum of Surveys, Reports, Court Cases etc. in Practice of Civil Engineering,” 22 May 1889, Courtesy of Dartmouth College Library.

²⁵*Springfield Union* (Vt.), 12 February 1887.

²⁶“First Biennial Report of the Railroad Commissioners of the State of Vermont,” 98–99.

²⁷*Rutland Herald*, 5 February 1887, 16.

²⁸*Burlington Free Press and Times*, 3 April 1889.

²⁹*Ibid.*, 5 April 1889.

³⁰*Ibid.*, 14 May 1889.

³¹*Boston Daily Globe*, 6 June 1889.

³²*Burlington Free Press and Times*, 9 January 1890.

³³*Ibid.*, 11 October 1889.

³⁴*Ibid.*, 9 January 1890.

³⁵C.A. Prouty, “Reports, . . . Supreme Court” (Vt.), Vol. 63, October 1890 (Burlington: Free Press Association), 101–103.

³⁶*Burlington Free Press and Times*, June, 1889.

³⁷The conflicting trial was undoubtedly that of *Henry Mott v. CVRR* being heard in the Grand Isle court in North Hero, because the defendants’ and plaintiffs’ attorneys were the same as those involved in the Westcott case.

³⁸*Burlington Free Press and Times*, 11 October 1889.

³⁹*Ibid.*, 25 February 1890.

⁴⁰*Ibid.*, 23 April 1890.

⁴¹Wesley S. Griswold., *Train Wreck!* (Brattleboro, Vt.: Stephen Greene Press, 1969), 85.

⁴²*Burlington Free Press and Times*, 2 October 1889.

⁴³*Ibid.*, 8 April 1890.

⁴⁴Annual Reports, CVRR, 1887–1892.

⁴⁵*Burlington Free Press and Times*, 17 October 1889.