

“I do not believe in fighting. I do not believe in wasteful construction. I do not believe in destroying business by foolish competition. We are coming to all these things with considerable rapidity.”¹

There once were two cats from Kilkenny

Each thought there was one cat too many.

So they fought and they fit

And they scratched and they bit

And instead of two cats, there ain't any!²

Chapter Four: Kilkenny Cats

In the 1880s when anti-monopoly was the rallying cry of American reformers, a group of men --call them railroad intellectuals-- made a compelling case that railroads were a natural monopoly. These university economists and railroad managers were often otherwise orthodox economic liberals who believed in markets, free trade, and competition, but they had come to regard competition as a way of regulating railroad rates utterly ineffective and counterproductive.

Railroad intellectuals turned anti-monopoly on its head. What anti-monopolists designated the solution—competition --became the problem. The rapid increase in railroad mileage in the 1880s, and the resulting competition for traffic, made railroad abuses worse, not better. Competition made railroads weaker even as it intensified complaints about the discrimination they practiced against their customers.

¹ Adams to Harris, Nov. 24, 1885, Union Pacific, President's Office, Outgoing Correspondence. NS 15986 volume. 30, series 2, reel 26. Hereafter, U.P., P.O., O.C., v.# , s. .2. r.# .

Much of the resulting argument was about the meaning and significance of competition. The import of the word was changing. For anti-monopolists competition remained a moral value. It was rooted in a sense of equity, individualism, freedom, and a hatred of special privileges bestowed by government.³ Attacks on special privilege in the form of land grants and unfair railroad rates targeted distortions of competition. Anti-monopolists not only stopped land grants, they rolled them back, and they successfully established state commissions to regulate railroads. Reformers, and courts, justified railroad commissions as legitimate tools for restraining the anti-competitive practices of railroads, which were “a restraint on individual freedom.” When the Supreme Court upheld these commissions in the so-called Granger cases, it marked the railroads as a specific class of property “clothed with a public interest” and holding monopoly power, in the sense that the public had no choice but to make use of its services.⁴ The court countenanced regulation of railroad rates because the railroads threatened competition and by threatening competition limited individual liberties.

At the heart of the anti-monopoly argument for competition was a single word: discrimination. The idea of discrimination entered most powerfully into American political discourse in the late nineteenth-century not in regard to race or gender, but rather in regard to the prices railroads charged their customers. That overall railroad rates were falling was not the issue. When the Senate Select Committee on Interstate Commerce reported its investigations in 1886, it concluded that the “essence of the complaints”

² Michael Quinion, World Wide Words, <http://www.worldwidewords.org/index.php>

³ I take this from Herbert Hovenkamp, *Enterprise and American Law, 1836-1937* (Cambridge: Harvard University Press, 1991). 270, 273. As he put it, anti-monopoly was, “a belief about the role of individual self-determination in directing the allocation of resources, and about the limits of state power to give privileges to one person or class at the expense of others.” It was about “liberty and free choice.” This kind of language would become less prevalent with the rise of neo-classical economics.

against railroads was “the practice of discrimination in one form or another.” The “great desideratum is to secure equality.”⁵

Railroads discriminated in three ways. They discriminated among people when they offered one shipper a lower rate than a competitor. Railroads discriminated among places when, all things being equal, they charged more for shipment from one place than another. They discriminated among things when they offered lower rates on one form of a product than on another, such as when they charged less for wheat than for flour or less for live cattle rather than frozen beef.

Charges of discrimination had resonance because they touched both the material interests of millions and basic notions of republican equity. Because railroads were chartered by the state, because the government used its powers of eminent domain to aid the railroads, because governments granted land to railroads and loaned some railroads credit, and because the railroads were public highways under common law, they had obligations to the public much greater than those of normal businesses. Critics claimed it was unjust for railroad corporations to set rates that discriminated against the citizens of the governments that gave them life.⁶ “When railroads charged more to some shippers than to others and more per mile from one place to another,” then, as James Hudson

⁴ Miller, Railroads and the Granger Laws, 172-193, particularly 188-189. Hovenkamp, Enterprise and American Law, 274.

⁵ Report of the Senate Select Committee on Interstate Commerce . . . Forty-Ninth Congress, First Session, Submitted to the Senate, Jan. 18, 1886 (Washington: GPO, 1886), 182., 215-16. For California, see Alfred A. Cohen, A Letter to the Board of Railroad Commissioners of California on the Policy of Legislative Interference with Railroad Tariffs (New York: Evening Post Job Printing Office, 208 Broadway, 1883) Huntington Library 128737, p. 5. See also, Larson, Bonds of Enterprise, 135-43. For Central Pacific denial, Statement of J.C. Stubbs, July 26, 1887, PRC 5: 2574-75. And, when they could, shippers often responded in kind. Discrimination, in turn, begat cheating. “The merchants in New York,” A.N. Towne complained, were “in the habit of shipping high class goods as low thereby deceiving the transportation companies.”, A.N. Towne to CPH, April 18, 1873, CPH r. 5, series 1.

⁶ James F. Hudson, The Railways and the Republic (New York: Harper & Brothers, 1886), 107-124, 135-138; Hovenkamp, Enterprise and American Law, 139-148; Report of the Senate Select Committee (1886), 41, 175-180.

argued in his 1886 Railways and the Republic, one of the most influential attacks on the railroads, “the equality of all persons is denied by the discriminations of the corporations which the government has created.” Wealth was “not distributed among all classes, according to their industry or prudence, but is concentrated among those who enjoy the favor of the railway power; and general independence and self respect are made impossible.” When such influences undercut “the establishment of a nation, of intelligent, self-respecting and self-governing freemen” the result was “little better than national suicide.”⁷ Hudson denounced discrimination among things as “prescriptive and unreasonable,” discrimination among places as “burdensome and dangerous,” and discrimination among persons as “corrupt and criminal.”⁸

When Hudson advanced free competition as the cure for discrimination and monopoly he echoed Henry George, who was the leading anti-monopolist of his age and one of the bridges between an older anti-monopolism that concentrated on land and the newer movement that concentrated on corporations.⁹ George was an autodidact, who aspired to being a professor at Berkeley. He combined flashes of brilliance with a doctrinaire devotion to the idea that came to define him: the single tax. The single tax was a heavy tax on land that would break up large holdings by forcing owners to either make land productive or dispose of it. Even before George became famous for Progress and Poverty, his Our Land and Land Policy was deeply rooted in the anti-land -monopoly politics of California and hostility to the Central Pacific railroad.

⁷ Hudson, The Railways and the Republic, 9.

⁸ James F. Hudson, The Railways and the Republic (New York: Harper & Brothers, 1886), 55.

⁹ Tamara Venit.

Progress and Poverty developed a cult of devoted followers and has doomed George to be remembered as something of a crank.¹⁰ But in most ways during the 1870s, Henry George was a man of quite conventional principles. He was a classic nineteenth-century liberal who believed in the wisdom of markets, the power of economic laws, and the autonomy of the individual. His was a Jeffersonian liberalism in which economic doctrines were but a means to achieve core political ends of democracy and equality for white men. He retained much of the old belief that government intervention in the economy benefited the rich and not the poor and hurt the nation as a whole. All the American people asked, he wrote, “is fair play, as between man and man; all the best Government can do for them is to preserve and administer justice.” He attacked land grants to the railroads as unnecessary and wicked interventions on behalf of the privileged that made an extravagant public gift to private parties, but he eventually came to believe the corporate monopolies had grown so strong that government ownership was preferable to current conditions.¹¹ For Henry George the Central Pacific Railroad had a double taint as a creature of privilege that yielded land monopoly and a transportation monopoly within California.

The moral and political core of anti-monopolism was the assault on special privilege and discrimination. Anti-monopolists argued that all of bulwarks of individual freedom were under assault from corporations which were, by their very nature, monopolies. Hudson, however, also conflated the moral meaning of competition as a

¹⁰ Thomas, Alternative America, 117-123; George, Progress and Poverty, 198, 204, 207-213, 271-72, 295-96, 340-41, 352-53

¹¹ For George’s intellectual evolution, see, John L. Thomas, Alternative America: Henry George, Edward Bellamy, Henry Demarest Lloyd and the Adversary Tradition (Cambridge: Harvard University Press, 1983), 117-123. For quote, see Henry George: The Complete Works of Henry George: Our Land and Land Policy, (New York, Doubleday, Page and Co., 1904), 34-35. For railroad and monopoly, Henry George, Social Problems (New York: Robert Schalkenbach Foundation, 1936), 176-77.

sign of liberty and antidote for discrimination with a newer sense of competition as simply a tool for restraining prices. The conflation of the two meanings exasperated the easily exasperated Charles Francis Adams, who had already accepted the demotion of competition from a moral imperative to simply a technical factor in neoclassical economics that helped establish “a relationship between prices and costs.”¹² Mr. Hudson was, Adams wrote, “a newspaper man; which means he is no thinker.”¹³ Everything Charles Francis Adams had learned about railroads in his years as a reformer and president of the Union Pacific could be encapsulated in the idea that “[c]ompetition and the cheapest possible transportation are wholly incompatible.”¹⁴

Charles Francis Adams, Jr. was a child of privilege. His family was among the prominent in the United States. John Adams, the second president of the United States, was his great grandfather. John Quincy Adams, the sixth president, was his grandfather. His father, also Charles Francis, had merely run for president and served as ambassador to England. When Adams had left the Union army, he had given what he regarded as his men’s assessment of him. They “don’t care for me personally,” he wrote. “They think me cold, reserved and formal. They feel no affection for me, but they believe in me, have faith in my power of accomplishing results, and in my integrity.” These he regarded as “old family traits.”¹⁵

¹² Hovenkamp, Enterprise and American Law, 274.

¹³ Adams was a critic of competition and overbuilding in the West as early as the mid 1870s, Charles Francis Adams, Jr. An Address delivered at Oshkosh, Wisconsin, Sept. 3, 1875, “Which Will Quickest Solve the Railroad Question: Force Bills or Public Opinion,” 6-7, in Adams, Railway Pamphlets, Stanford University Library. Adams to Callaway, Jan. 11, 1879, U.P., P.O., O.C., v. 39, ser. 2, r. 34. Adams, Railroads, 130. For competition a cure, James F. Hudson, The Railways and the Republic (New York: Harper & Brothers, 1886), 368, but even Hudson recognized the problem of duplicate lines., 415-22. Adams to E.P. Alexander, U.P., P.O., O.C., v. 35, ser. 2, r. 31.

¹⁴ Charles Francis Adams, “Which Will Quickest Solve the Railroad Question: Force bills or Public Opinion?” Oshkosh, Wisconsin, Sept. 3, 1875, in Charles Francis Adams, Railway Pamphlets, Stanford University Library, 7-11, quote 9

¹⁵ Kirkland, Charles Francis Adams, 31.

Adams and the railroad intellectuals admitted that their defense of monopoly was counter-intuitive. Most Americans regarded competition as “a nostrum at once universal and infallible.” Competition, however, helped neither railroads nor their customers.¹⁶

Adams, who by 1886 was president of the Union Pacific, had played a major role in popularizing this critique of competition, but by 1885 he was promoting not his own books but a book by Arthur Hadley, a young professor at Yale. Hadley’s Railroad Transportation was not particularly original, but it was wonderfully, clear and succinct. Adams believed even congressmen could understand it, and he liked to send them copies. “All our education and habit of mind,” Hadley wrote, “make us believe in competition.” Competition in a free market theoretically made the price of goods “proportional to their cost of production.” When the price fell below the cost of production, producers would cease to produce and prices would rise to a point that stimulated renewed production. When any endeavor proved profitable, new producers would arise and the competition among them would lower or stabilize prices. But, Hadley argued, competition among railroads did not work this way. When prices fell, railroads continued to solicit traffic, even when they had to carry it at a loss because their high fixed costs meant they lost even more if their equipment lay idle. “Business at any price rather than no business at all,” was their motto.¹⁷ Eventually, of course, some would fail. Followed to its logical

¹⁶ Check all. Cohen, *A Letter to the Board of Railroad Commissioners Quincy*, *ibid.*, particularly 25. For quotes, see Thomas McCraw, *Prophets of Regulation: Charles Francis Adams, Louis D. Brandeis, James M. Landis, Alfred E. Kahn* (Cambridge: Harvard University Press, 1984), 9-10. Charles Francis Adams, “Which Will Quickest Solve the Railroad Question: Force bills or Public Opinion?” *Oshkosh, Wisconsin*, Sept. 3, 1875, in Charles Francis Adams, *Railway Pamphlets*, Stanford University Library, 7-11, quote 9. Charles Francis Adams, *Railroads: Their Origin and Problems*, (New York: G.P. Putnam’s Sons, 1878), 116-17. Hovenkamp, Enterprise and American Law, 139-148 gives a particularly lucid account of natural monopoly.

¹⁷ Arthur T. Hadley, Railroad Transportation: Its History and Its Laws (New York: G.P. Putnam’s Sons, 1895, orig. edition, 1885), 67-74. Get page of quote

conclusion, competition would either leave only one road standing, thus creating the monopoly it was supposed to prevent.¹⁸

A railroad was a natural monopoly because competition served to make it less rather than more efficient. This was because of the high proportion of fixed costs involved in operating railroads. William Ripley, the leading railroad economist of the early twentieth-century, had the advantage of the first reliable railroad statistics produced by the ICC, but he basically validated earlier insights of the railroad intellectuals. He calculated that two-thirds of a railroad's costs were fixed.¹⁹ Cheap transportation would come from "directing the largest possible volume of movement through the fewest possible channels" and not from encouraging the duplication that created competition.²⁰

Hadley gave a simple calculation that showed why fixed costs made competition disastrous for railroads. Imagine a situation where railroad A connects two places. It carries 100,000 tons of freight at \$.25 a ton between those places and earns \$25,000 a month. It costs \$10,000 to run the trains, the remainder goes to interest, maintenance and general expense. This \$15,000 is a fixed charge that does not vary with traffic. Now imagine a second railroad B that builds a parallel line and cuts the rate to \$.20. Railroad A must meet the rate. When B reduces its rate to .15 to gain traffic, A must do the same. The new rate does not allow railroad A to pay interest, but it can still pay for repairs. Railroad B cuts further to \$.11. "If," Hadley explained, "you take at 11 cents freight that

¹⁸ This and what follows is a summary of Hadley's argument when not otherwise indicated. Arthur T. Hadley, Railroad Transportation: Its History and Its Laws (New York: G.P. Putnam's Sons, 1895, orig. edition, 1885), 67-74.

¹⁹ William Z. Ripley, Railroads, Rates, and Regulation (New York: Longman's Green, and Co., 1912), quote 53-54, 55, 65, 89..

²⁰ For other discussions of natural monopoly and fixed costs, Quincy, *ibid.*, particularly 25. For quotes, see Thomas McCraw, Prophets of Regulation: Charles Francis Adams, Louis D. Brandeis, James M. Landis, Alfred E. Kahn (Cambridge: Harvard University Press, 1984), 9-10. Charles Francis Adams,

cost you 25 cents to handle, you lose 14 cents on every ton you carry. If you refuse to take it at that rate, you lose 15 cents on every ton you do not carry. For your charges for interest and repairs run on, while the other road gets the business.”²¹

The only solution railroad intellectuals could offer in the short term was pooling. A pool was a formal organization among competing roads to divide the revenue of a certain class of traffic—the transcontinental traffic, the traffic in Colorado or Utah, or the traffic passing to and from the Union Pacific to the Chicago roads at Omaha. As Adams explained, “[t]he vital element of a pool is the payment of all money received into a common fund and the return of the money, in fixed proportions, to each party in the pool.” These divisions of revenue were predetermined. It made no difference how much traffic a road was actually carrying, although the percentages would be periodically adjusted to reflect the changing tonnage of each road. A pool made numerous railroad companies act as if they were a single company. It demanded a “unity of management,” consistent, its advocates argued, “with the public interests.” A pool set rates and abolished rebates and special contracts on competitive through traffic. The most ambitious pools established “a permanent executive department . . . to see that the resolutions passed and agreements made are faithfully carried out.” They also had a “judiciary department, consisting of a board of arbitration” to settle disputes. The roads agreed to submit their books to a pool commissioner to make sure that they were turning over the promised revenue.²²

“Which Will Quickest Solve the Railroad Question, in Adams, Railway Pamphlets, Stanford University Library, 7-11, quote 9. Hovenkamp, Enterprise and American Law, 139-148.

²¹ Hadley, Railroad Transportation, 70-71.

²² Fink, *ibid.* 15., `7, 18-19, 20-21. McCraw, prophets, 4i.

Testimony of Charles Francis Adams, July 13, 1888, U.S. Pacific Railway Commission, 4: 2003-04

Charles Francis Adams was initially one of the most enthusiastic advocates of pools. In 1879 he had joined Albert Fink in managing the most famous pool of all by accepting the position of chair of the Board of Arbitration of the Eastern Trunk Line Association, a railroad pool that encompassed virtually all of the major lines east of the Mississippi. In the West, the famous Iowa pool controlled the distribution of traffic to the roads connecting with the Union Pacific at Omaha, and other pools multiplied across the region in the 1870s and 1880s. The Union Pacific, for example, had pools “everywhere” before the Interstate Commerce Act outlawed them in 1887.²³

Pools, however, tended to be transitory because there was no way legally to enforce the agreements. They were vulnerable to false bookkeeping, to solicitation of traffic off the books at lower rates, and other manipulations. They fell apart from cheating, from the conviction of one member that it could defeat the others in open competition, and from the invasion of a pool territory by a new road. Eventually even the famous Iowa Pool declined and fell apart. Each piece of cheating, each incident of aggression, each time lines cut across each other or invaded new territory, the harder it was to reconstitute a pool.²⁴ Once a pool dissolved and competition resumed and with it the descent toward receivership for one or more of the roads. There were only a limited set of outcomes. The railroads could reconstitute a pool, or fight until only one remained,

²³ McCraw, *Prophets of Reulation*, 48-49.; Charles Francis Adams, *Railroads: Their Origin and Problems* (New York: G.P. Putnam’s Sons, 1878), 148-180; Testimony of Charles Francis Adams, April 17, 1887, 109. Robert E. Riegel, “Western Railroad Pools,” *The Mississippi Valley Historical Review*, 18, no. 3 (Dec. 1931), 364-377. Perkins to Forbes, March 17, 1884, C.B. & Q. 33 1880 7.2

²⁴ Perkins to Forbes, Jan. 29, 1884, C.B.&Q. 3.2-3.5.; Perkins to Forbes, Jan. 4, 1884, C.B.& Q. 1880 7.2 Newberry Library. M. Hughitt to C.F. Adams, Dec. 29, 1888, U.P., 3761, S62 S 1, Box 64, folder 1. The classic account of the Iowa Pool is Julius Grodinsky, *The Iowa Pool: A Study in Railroad Competition: 1870-84* (Chicago: University of Chicago Press, 1950),

or one railroad could buy out the other. All, as Adams contended, eventually “resulted in combination.”²⁵

II Excessive Competition

In the 1880s, during the region’s great age of railroad building, the North American West was a textbook example of excessive competition. The vast bulk of railroad building in the late 1870s and early 1880s—nearly 75% in the peak year of 1882- - took place west of the Mississippi, in western Canada, and in northern Mexico. The railroad mileage of the Pacific states (Idaho, Utah, New Mexico and Arizona as well as Washington, Oregon and California) increased from 4,461 miles in 1879 to 7,961 miles in 1884, while the mileage of the interior Western states (the states between the Mississippi and the Rockies, except Louisiana) rose from 22,959 in 1879 to 32,741 in 1884.²⁶ Mexico’s lavish concessions to American railroad promoters were responsible

²⁵ Charles Francis Adams, “Which Will Quickest Solve the Railroad Question: Force bills or Public Opinion?” Oshkosh, Wisconsin, Sept. 3, 1875, in Charles Francis Adams, *Railway Pamphlets*, Stanford University Library, 9.

²⁶ Adams to S.R. Callaway, Dec. 1, 1884, Union Pacific, President’s Office, Outgoing Correspondence. v.24, series 2, r. 21. Adams to Hoyt, Feb. 4, 1885, U.P., P.O., O.C., v. 27, ser. 2, r. 23.; Adams to Joseph Richardson, Aug. 6, 1885, U.P., P.O., O.C., v. 29, ser. 2. R 25. Arthur M. Johnson and Barry Supple, *Boston Capitalists and Western Railroads: A Study in the Nineteenth-Century Railroad Investment Process* (Cambridge: Harvard University Press, 1967), 273-76. Charles Francis Adams, Testimony Taken by the United States Pacific Railway Commission ...50th Congress, 1st Session, Ex. Doc. 51, pt. 2, (Washington: GPO, 1887) 1: 85. For construction, Henry V. Poor, *Manual of Railroads, 1886*, ii. L Poor, *Manual of Railroads*, 1880, v.Poor’s statistics are often mutually contradictory from table to table, but they are still the best available source for these years. Poor includes Michigan, Ohio, Wisconsin and Illinois in the Western Group in the early 1880s. I have subtracted them. For stagnant or declining traffic and earnings, see Henry V. Poor. *Manual of Railroads, 1885*. x, xii-xiii. For breakdown by regions, which shows a steady decline in gross traffic earnings in the Pacific States in 1883, 1884, and 1885, and a sharp decline in the western states (the states between the Mississippi and the Rockies) between 1883 and 1884 and then a slight rebound in 1885, but not enough to regain the 1883 peak. Henry V. Poor, *Manual of Railroads, 1886*, ii. . Nationally, 40,000 miles had been added to the railroad system between 1878 and 1883 and the total earnings of the road, in so far as their reports can be trusted, rose from \$472,909,272 in 1879 to \$823,722,924 in 1883, a ratio of increase of about 75%. In 1884, however, only 4,000 miles were built. Western roads remained profitable in 1884. Henry Poor, *Manual of the Railroads of the United States for*

for most of the 5,898 kilometers (3665 miles) of Mexican railroad in 1885. As late as 1881, the Union Pacific/Central Pacific route was the only railroad to the Pacific Ocean; by mid-decade it was one of many. Starting in Canada and moving south, there was the Canadian Pacific, the Northern Pacific, and the Oregon Short Line –a new Union Pacific route to Portland -- that allowed the U.P. to divert traffic from the Central Pacific. South of the original Pacific Railroad were the Southern Pacific, which reached New Orleans in 1883, and the Atchison Topeka and Santa Fe, which reached Guaymus through its Sonoran connection in 1882, before breaking through the Associates defenses to reach San Diego in 1885. In addition, the Denver and Rio Grande had breached the Rockies and reached Salt Lake, providing another connection to routes farther west. The Frisco and the Atlantic and Pacific, which the Frisco controlled, had reached Needles on the California border. The Burlington had had plans to go all the way across the continent but thought better of it and stopped at Denver, which proved a good decision since its through freight from Denver in 1878 was only 86 cars and its westward freight to Denver only 759.²⁷ The Chicago and Northwestern also stopped east of the Rockies.

In addition to the roads dividing the continent horizontally, there were new north/south roads splitting it vertically. The Mexican Central, which ran from El Paso to Mexico City and was completed in 1884, was part of the Atchison, Topeka and Santa Fe system. The Palmer/Sullivan concession yielded the Mexican National Railway, an extension for all practical purposes of the Denver & Rio Grande, from Laredo to Mexico

1885 (New York: H.V. & H.W. Poor, 1885), iii-iv. For revival, Adams to Colgate Hoyt, Nov. 5, 1885, U.P., P.O., O.C., v. 30, ser. 2, r. 26. For Mexico, Hart, *Empire and Revolution*, 121.

²⁷ Statement of Chicago business to/from and through Denver Col. During the year 1878, 33 1870 7.42-8.11, C.B. & Q.

City. It was finished in 1887, but by then it had passed to English bondholders and became the Mexican National Railroad.²⁸

In 1885 that Charles Francis Adams had a chance to inspect western railroad progress firsthand. He left New York at midnight on April 17, 1885 eventually picking up the Chesapeake and Ohio and going south and west along the patchwork of roads Collis P. Huntington had put together to form the eastern half of a national system that connected with the Southern Pacific at New Orleans.^{29*} Adams hated New Orleans; he hated it generally and particularly. He hated its heat, filth and vermin. He hated the St. Charles Hotel. From New Orleans he boarded the Southern Pacific for El Paso, where he would take the Mexican Central for Mexico City.

Huntington, Adams had concluded, was in trouble. At night, when Adams could not see beyond the darkness that surrounded his private car, he relied on his body to record the bumps and jolts and his map and watch to gauge the time between stations and thus the speed of the train. In the daylight he surveyed the country, counted passing trains, and looked for tank cars carrying water. He talked to conductors and porters and counted passengers. The line to New Orleans was a wretched ragtag of mismatched pieces. Much of it was poorly built; some still had iron rails, which were less durable than steel. The swaying cars, the lack of speed all translated into money that Huntington would have to spend east of the Mississippi. And in 1885, with the country once again in depression, Huntington could not command such capital. “[T]his system,” Adams wrote, “I think must go to pieces in bankruptcy.” And between 1885 and 1887 much of the

²⁸ Fred Wilbur Powell, *The Railroads of Mexico* (Boston: The Stratford Company, 1921), 134.

²⁹ Adams to C.F. Morse, April 16, 1885 U.P., P.O., O.C, v. 28, s. 2, r. 24. For the Huntington system, Grodinsky, *Transcontinental Railway Strategy*, 163-65. Huntington to Crocker, March 14, 1883, CPH Papers, r. 6, ser. 2, v. 30: 49-50.

system did fall piecemeal into receivership; Huntington unloaded his interests.³⁰ The Southern Pacific connected to New York and the east through the Morgan Steamship line running out of New Orleans.³¹

Adams took the Southern Pacific's Sunset Route out of New Orleans. In 1885 the Sunset Route, and the Texas railroad map in general, were the fruits of the Associates victory over Tom Scott. In late 1879 Jay Gould had gained control of the Texas & Pacific from the sick Scott, and with it, he acquired Scott's old war with the Associates. In 1881 Gould sued, arguing that since the Southern Pacific had built on the Texas & Pacific right-of-way in New Mexico, the T.P. owned the S.P. During the trial Gould's lawyers called the Southern Pacific an octopus; the Southern Pacific's lawyer, the Associates' old friend Senator William Stewart, called the Texas & Pacific an incubus. It was a trial in which perhaps only the invective was accurate.³²

East of San Antonio Adams' missed a connection that put the train a day behind schedule; it was symptomatic of the inefficiency of the little lines Huntington had stitched together to reach New Orleans from San Antonio. These eastern Texas roads, Huntington admitted, included "the worst . . . I have ever traveled over."³³ Adams was more impressed with the country, which was rich and fruitful and prosperous, than the road. He thought San Antonio "one of the most attractive places that I had ever seen in

³⁰ Adams to F. Ames, April 23, 1885, U.P., P.O., O.C, v. 28, ser. 2, r. 24. Grodinsky, Transcontinental Strategy, 164-65. Adams private car was equipped with a "speed indicator," but it rarely worked. Adams to G.W. Cushing, July 16, 1889, U.P., P.O., OC. V. 48, ser. 2, r. 43.

³¹ Testimony of Collis P. Huntington, Testimony Taken by the United States Pacific Railway Commission . . . 50th Congress, 1st Session, Ex. Doc. 51, pt. 2, (Washington: GPO, 1887) 1: 41

³² Klein, Jay Gould, 250, 258-59, 269-71. Note by Timothy Hopkins on letter, Personal and Confidential, CPH to Col. Thos A. Scott, May 25, 1877, v. 9: 185, Box 24, Hopkins Correspondence. For Huntington's account, "Thirty-Second Parallel Pacific Railroad, Remarks of C.P. Huntington . . . Before the Committee on Public Lands of the U.S. Senate, Feb. 2, 1884, on House Bill 3933" (New York, John C. Rankin, Jr. Printer, 1884), 14.

³³ Huntington to Crocker, May 3, 1882 v. 29, CPH Papers, ser. 2, r. 6

America.” West of San Antonio the road improved and the country declined.

Huntington, needing a Texas charter, had reached an arrangement with Col. Thomas Peirce of the Galveston, Harrisburg and San Antonio that gave the Associates effective control of that road.³⁴ The Associates contracted with Peirce to link San Antonio and El Paso, and he, in turn, hired their latest corrupt corporate jack of all trades, the Pacific Improvement Company, to do the building. Peirce paid them in stocks and bonds that left the Southern Pacific in control of the new line.³⁵ The new road traversed difficult country, but despite a washout at Eagle Pass that cost Adams another twenty-four hour delay, he thought the road good. Once they hit the Rio Grande, the country was, however, “absolutely unproductive”; the small herds of cattle in the gorges did not indicate much for the road to haul. In a day’s travel Adams passed only one freight locomotive and that pulled mostly empties. The country was without wood and water. The trains ran on poor quality coal brought up from Mexico and, lacking enough artesian wells, the railroad had to haul tank cars with water for the locomotives. With no agriculture, no minerals, and with only cattle to be split with the Texas & Pacific, the Southern Pacific had to depend on through traffic. How “the Southern Pacific, sustains itself at all,” Adams wrote, “is a greater and greater mystery to me.”³⁶ By 1885 its rival, the Texas & Pacific, could not sustain itself. It could not pay interest on its debts and large portions of the road were decrepit.³⁷

³⁴ CPH to Stanford, April 5, 1880, CPH Papers, v. 27, series 2, r. 6.

³⁵ the basic outlines of the arrangement of Peirce were broached in 1880. CPH to Stanford, April 5, 1880, CPH series 2, r. 6, v. 27

³⁶ Adams to Ames, April 23, April 30, 1885, UP, Pres. Office, Outgoing Correspondence, v. 28, ser. 2, r. 24; S.G. Reed, A History of the Texas Railroads (Houston, TX: The St. Clair Publishing Company, 1941), 195-199.

³⁷ Report of Special Committee, The Texas & Pacific Railway Co., Dec. 8, 1885, Powderly Papers, reel 11.

The Southern Pacific sustained itself, initially, by becoming a vampire road that drained traffic from the Central Pacific, which, since the Central Pacific and Union Pacific formed a single route, also meant taking traffic from the Union Pacific. In Adams' view, the Central Pacific became, for the moment anyway, a mere "bob tail road, ending at Ogden."³⁸ In 1884, the first full year in which the completed Southern Pacific ran to New Orleans, the reported earnings of the Central Pacific fell by 40% from the previous year from \$8,094,149 to \$4,872,734. By the spring of 1886, the Sunset Route of the Southern Pacific was carrying 93.7% of the freight traffic from California to New York. The Southern Pacific the Associates the benefit of reducing the amount of money they had to pay into the sinking fund provided by the Thurman Act.³⁹

By May 3, Adams was in Mexico City after a "very interesting . . . and . . . instructive journey." He traveled the Mexican Central. Thomas Nickerson, who had been president of the Atchison until 1880, remained president of the Mexican Central.⁴⁰ The Mexican Central was an American road, but Mexico was "a more thoroughly foreign country than I ever was in before. It is half Indian and half Moorish; and the whole journey from El Paso to the City of Mexico is an insight into a new life." Like the Southern Pacific in West Texas, the Mexican Central in northern Mexico was a very

³⁸ Adams to F.L. Ames, April 23, 1885, U.P., P.O., O.C., v. 28, s. 2, r. 24. Testimony of Leland Stanford, Aug. 3, 1887, Pacific Railroad Commission, 2818-19. Stanford claimed that diversion of traffic became serious only when competition with other roads forced SP to do so. He also claimed SP had advantage of not going through Chicago with delays there that CP suffered.

³⁹ Adams to Geo. Edmunds, March 17, 1885, Adams to Colgate Hoyt, March 18, 1885, U.P., P.O., O.C., v. 28, ser. 2, r. 24. Henry V. Poor, *Poor's Manual of Railroads*, 1885, 866. Henry V. Poor, *Manual of Railroads*, 1886, xxiii. From Nov. 1885 to May 1886, the figure was 78% of the freight, Callaway to Adams, May 15, 1886, U.P., RG 3761, Box 34, f. 1

⁴⁰ Sandra Kunz Ficker, *Empresa Extranjera Y Mercado Interno: El Ferrocarril Central Mexicano, 1880-1887* (México, D.F.: El Colegio De México, 1995), 46, 59; Arthur M. Johnson and Barry E. Supple, *Boston Capitalists and Western Railroads: A Study of the Nineteenth-Century Railroad Investment Process* (Cambridge: Harvard University Press, 1967), 292. John S. Fisher, *A Builder of the West: The Life of William Jackson Palmer* (Caldwell, Idaho: The Caxton Printers, 1939), 272.

good road through nowhere.⁴¹ Adams thought that what little business northern Mexico might provide would be drained off to New Orleans when Palmer finished the Mexican National. If the Mexican Central leased the new road in self-defense, it would be left with 800 miles of useless road to El Paso.⁴² In this Adams was wrong only because the Mexican National insisted on building a narrow gauge road on which it was difficult to interchange cars and traffic. Mexico would not standardize its gauges until 1902.⁴³

Adams' pessimism was not much relieved as the zigzag journey continued. He traveled the Southern Pacific/Central Pacific across the Southwest to Los Angeles, then up to San Francisco, and east to Salt Lake City. Then he went north on the recently built Oregon Short Line, a subsidiary of the Union Pacific to Portland, then east again on the Northern Pacific to St. Paul, down to Omaha, and then west to Denver on the Union Pacific and its connector, the Denver Pacific. He returned on the Kansas Pacific. He thought the Northern Pacific was in a hopeless position with the Canadian Pacific to its north, lack of traffic in the United States, and the prospect of a difficult and expensive construction over the Cascades to complete its direct link to Tacoma.⁴⁴ Except for western Canada, he had seen most of the vast territory that had recently been opened up by the transcontinentals.

⁴¹ Matias Romero, Geographical and Statistical Notes on Mexico (New York: G.P. Putnam's Sons, 1898), 196, 214-15. The freight earnings on the Mexican Central increased from \$2,287,410 in 1885 when Adams road, to 7,646,257 in 1896. The freight earnings thus more than tripled while the road's mileage expanded by roughly 1/3 from 1,235 to 1,869. The road, however, relied largely on mineral traffic. Mexico did not have the road system nor did the Mexican Central develop connections with other roads that could have expanded its local freight. Ficker, "Economic Backwardness and Firm Strategy," HAHR, 279-282., 286-88.

⁴² This would not happen largely because the Mexican National was a relatively poorly built narrow gauge line, "Trade and Commerce of Paso del Norte," Reports from the Consuls of the United States, volume 39 (Washington: GPO, 1889) 50th Congress, 2d Session, House of Representatives Mis. Document no. 141, 754. Fisher, A Builder of the West, 272-78.

⁴³ Ficker, "Economic Backwardness and Firm Strategy," HAHR, 279

⁴⁴ Adams to Dillon, June 24, 1895, U.P., P.O., O.C, v. 29, s. 2, r.24.

What Adams did not know, was that the Canadian Pacific was in the midst of a financial crisis that forced it to turn the Canadian government for more aid.⁴⁵ Like the American transcontinentals, the Canadian Pacific was built ahead of demand across a difficult and sparsely populated territory with such a heavy debt that it had problems meeting its fixed interest charges to the Canadian government. It was born a near bankrupt, and even before it was complete was offering part of its land grant in exchange for retiring \$10 million dollars of the debt it owed the government. This was the same attempt to exchange a gift for forgiveness of a debt that the Pacific Railway had tried, except in the Canadian case it would work.⁴⁶ As with the Union Pacific, the government's lien on its lines and its own precarious financial condition, made it difficult for the Canadian Pacific to sell bonds on its branch lines.⁴⁷ And as with the American roads, anti-monopoly opposition--in this case the "Grits," the equivalent of the American Grangers— further hurt their ability to sell land and sell bonds.⁴⁸ The CP responded by cutting necessary investments and upkeep to make the road appear profitable. It had not been in full operation for a year, before instructions went out "to make a good showing in the working of the railway this year . . . even if we are unable to keep up the property in what we would regard as a first class condition."⁴⁹

Adams witnessed the first stage of overbuilding; he was about to participate in the second. The overbuilding of the late 1880s was the outgrowth of the trunk lines overbuilt

⁴⁵ Van Horne to J.H. Pope, May 19, 1884, Letterbook 6: 145, MG 28 III 20, vol. 2, Canadian Pacific Railroad National Archives of Canada. Hereafter, LB, MG. . . CPR, NAC. John Lorne McDougall, Canadian Pacific: A Brief History (Montreal: McGill University Press, 1968), 54-60.

⁴⁶ Van Horne to Andrew Cleghorne, Sept. 8, 1885, Van Horne Letter Book No. 13: 223-226, MG 28 III 20, vol. 2, NAC.

⁴⁷ Van Horne to Robert Baird, Jan. 29, 1886, Van Horne to T. Mayne Waly, Feb. 1, 1886 Van Horne Letter Book 15:133-34, MG 28 III 20, vol. 3, NAC.

⁴⁸ Van Horne to Brown, March 4, 1884, Van Horne Letter Book 5, Canadian Pacific Railroad, M.G. 28, III 20, Public Archives of Canada, Microfilm, Reel 4, 2168

in the early 1880s that had so divided the transcontinental traffic so as to make it practically worthless. In the late 1880s the trunks grew branches. When the U.S. census recorded the number of people per mile of completed railroad in 1840, it was 6,194. In 1880 the number was 571. By 1890 it was 375.⁵⁰ By the end of 1889 more than 20% of the United States' railroad mileage of 161,000 had been constructed in the last 4 years. The states and territories west of the Mississippi, excluding Louisiana, kept pace. They had only 24% of the country's population in 1890, but they had 43% of the railroad mileage. The Pacific group now had 11,473 miles, while the Western Group had 58,536. In Mexico Americans had laid 11,500 kilometers (7146 miles) of track by 1896 and owned 80% of the securities issued by Mexican railroads. The Mexican Central alone built 1,200 miles between 1880 and 1890.⁵¹

The extreme example of this second wave of overbuilding came in Kansas. The line that divides western Kansas from central Kansas resembles the weaving path of a drunk careening from a starting point just west of the 98th parallel in the north and tilting west as he goes south. This path was the line of 25 inches of rainfall. West of this line, and forming the largest section of the state, is that part of Kansas where an average year's rainfall is not enough to guarantee a crop.⁵² East of this line in central Kansas were three of the major wheat producing counties in the state. Building in Saline, McPherson

⁴⁹ Van Horne to H. Abbott, April 8, 1887, Van Horne Letter Book 21: 2, , MG 28 III 20, vol. 4, NAC

⁵⁰ Report of the U.S. Congress Senate Select Committee on Interstate Commerce, 49th Congress, First Session (Washington: GPO, 1886), 10; Poor's Railroad Manual, 1892, xxii. The transcontinental traffic was the most expensive to secure and the least remunerative of all traffic for the Union Pacific. "Freight Department (1885)", P.P. Shelby in "Freight and Passenger Earnings, 1885", U.P., MS 3761, unnumbered box, p. 137

⁵¹ Poor's Manual of Railroads, 1890, xv. I have combined the Southwestern and Northwestern groups in Poor's Manual to get all the roads between the Mississippi and the Rockies, again except Louisiana. Hart, Empire and Revolution, 122. Sandra Kunz Ficker, "Economic Backwardness and Firm Strategy: An American Railroad Corporation in Nineteenth-Century Mexico," Hispanic American Historical Review 80 (May 2004), 270.

counties and Barton counties made sense. The population of Central Kansas rose from 451,000 to 657,000 people between 1880 and 1887 with most of the increase coming between 1885 and 1887. Adding more roads here was not always necessary, but it was not disastrous. The real question involved the wisdom of building into western Kansas and on into Colorado.⁵³

The history of western Kansas did not give much promise. Prompted by the Burlington's plans to build along Prairie Dog Creek in northwestern Kansas, Charles Francis Adams had a preliminary survey run for two routes from the North Fork of the Solomon River west across rolling plains "entirely destitute of wood and water" to the main line of the Kansas Pacific at Monument and Gopher. He found the country largely settled by stockmen. There had been a migration of farmers into the country between 1879 and 1882, which had been unusually wet years. Drought had driven them out, but by 1885 five railroads –the Atchison, Topeka and Santa Fe, the Union Pacific, the Missouri Pacific, the Burlington & Missouri, and the Rock Island –were poised to expand into western Kansas north of the Arkansas River. The railroads were like racers on a starting line in a race none of them particularly wanted to run. They would run only because they feared their rivals would run without them; it was thus not in their best interests to break first. The A.T. & S.F. and U.P. feared the Missouri Pacific.⁵⁴ The

⁵² For Kansas regions, see Scott G. McNall: *The Road to Rebellion: Class Formation and Kansas Populism, 1885-1890* (Chicago: University of Chicago Press, 1988), 70-79.

⁵³ The reconstruction of the leading wheat producing counties depends on mapping material from the 1880 and 1890 censuses by using the database of Geospatial and Statistical Data Center, <http://fisher.lib.virginia.edu/> which allows the mapping of the census data.

University of Virginia Library Ellis county in 1890 rose to 44,836 planted in wheat, while Rush County had 38,493. Need Kansas data, since census changes from bushels produced in 1880 to acres planted in 1890.

⁵⁴ For a summary of the situation in the spring and fall of 1885, Adams to Callaway, May 18, 1885, P.O., O.C., v. 31, ser. 2, r. 27, Adams to Callaway, Nov. 17, 1885, U.P., P.O., O.C., v. 33, ser. 2, r. 26. Also Adams to Callaway, Aug. 31, 1885, Sept. 7, 1885, President's Office, Outgoing Correspondence, v. 32, ser. 2, r. 27. Adams to Strong, Sept. 19, 1885, U.P. P.O., O.C., v. 29, ser. 2, r. 25.

Missouri Pacific, in turn, feared the Burlington and Missouri.⁵⁵ County boosters offered subsidies, and railroad engineers traced new routes, often along obscure creeks toward desolate towns, even though three of them –the Union Pacific, the A.T. & S.F. and the Missouri Pacific already ran through or into the region. Adams feared that the railroads would “go to work constructing like madmen.”⁵⁶ They were, he wrote Perkins at the end of 1885, about to enter upon a “Kilkenny cat period of existence which can result in but one thing; that is immense waste of opportunity and wealth. If it should not result in ruin, it will be fortunate.”⁵⁷

Caution was not a key attribute of Jay Gould. The Union Pacific had leased the Central Branch, which ran between and parallel to the Union Pacific and the Kansas Pacific trunk lines through “a very rich region”, to Gould’s Missouri Pacific, in return for Gould’s promise not to build lines that competed with the Union Pacific in central and western Kansas.⁵⁸ Forbes of the Burlington was skeptical of an agreement with Gould, who had. “as many aliases as a London professional thief.” Forbes was right. By 1886 Gould was building the Kansas & Colorado Railroad toward Pueblo under the subterfuge

⁵⁵ Adams to Gould, Dec. 16, 1884, U.P., P.O., O.C., v. 23, ser. 2, r. 20, Adams to Gould, July 3, 1886, U.P., P.O., O.C., v. 29, series 2, r. 24; S.R. Callaway to Adams, May 12, 1886, U.P. MS3761, SG2 S1, Box 34, f. 3: Callaway,

⁵⁶ Adams to Perkins, Sept. 25, 1885, U.P. P.O, O.C., r. 29, ser. 2, r. 25.. Calloway to Adams, Jan. 6, 1887, U.P. RG 3761, Box. 57, f. 5

⁵⁷ Perkins to Forbes, May 23, 1884, C.B. & Q. 33, 1880, 7.2Adams to Perkins, Dec. 30, 1885, U.P., P.O., O.C., v. 30, ser. 2, r. 26. For Adams rationales, Adams to Gould, July 3, 1886, U.P., P.O., O.C., v. 29, series 2, r. 24; He was, however, still willing to consider a coal road from Monument to the Central Branch, Adams to Sidney Dillon, U.P., P.O, O.C. v. 28, ser. 2, r. 23. Except for rain following the plow, Adams guesses about the future were essentially correct. The population of western Kansas increased from 97,000 to 234,000 with most of the growth between 1885-87, and Ellis and Rooks counties just beyond the 99th meridian formed the western tier of leading wheat producing counties in 1890.⁵⁷ Adams had made a case for cautious expansion that should not proceed much beyond the 99th meridian.

⁵⁸ * eliminate all of note but Missouri Pacific & Central branch.***Adams to Callaway, Aug. 31, 1885, Sept. 7, 1885, President’s Office, Outgoing Correspondence, v. 32, ser. 2, r. 27. Adams to Gould, May 10, 1885, U.P., P.O., O.C., v. 28, ser. 2, r. 24. . This was only part of the construction going on, Adams to Callaway, Oct. 8, 1885, *ibid.* The Missouri Pacific was also maneuvering east of Salina, which, of course, was encouraging competition. Adams to Callaway, Oct. 10, 1885, President’s Office, Outgoing

that it was not part of the Missouri Pacific. It paralleled a new extension of the Atchison, and both competed with the Kansas Pacific.⁵⁹ In retaliation, the Atchison laid plans to build into northern Kansas and attack the Central Branch.⁶⁰ On every side there were men whipping runaway horses because, looking around them, they saw other men doing the same and thought there must be a reason.

Railroad war had begun. The Atchison and the Missouri Pacific both bolted west from the Great Bend of the Arkansas paralleling each other about two miles apart to Greeley County on the western border. It was the “maddest specimen of railroad construction of which” Adams had ever heard, and he joined it, vowing to “carry this war directly into Africa.”⁶¹ Not to build was to die “a slow death of inanition.” He would carry out “a bold, clear cut, aggressive policy.”⁶² In January of 1887 Adams was considering seventeen different new lines and branches in Kansas, many of them useful only to preempt other roads or to threaten their business.⁶³ In this he imitated the A.T. & S.F.’s and the Burlington’s practice of “covering by their charters and by bonded aid all the territory which is, or at any future time might be tributary to their roads.” At Colby in the far northwestern corner of the state the Union Pacific met the Rock Island, which in

Correspondence, v. 32, ser. 2. R. 28. For brief history of Central Branch see Testimony of Charles Francis Adams, Pacific Railway Commission, 1:55-56.

⁵⁹ Gould initially contended this road was not part of the Missouri Pacific. A subterfuge no one else accepted. Adams to Gould, Aug. 14, 1886, U.P., P.O., O.C. v. 36, ser. 2, r. 31. Henry Poor, *Manual of Railroads of the United States for 1888* (New York: H.V. & H.W Poor, 1888), 800. Klein, *Jay Gould*, 343.

⁶⁰ Adams to A.L. Williams, Feb. 16, 1887, U.P., P.O., O.C., v. 37, ser. 2, r. 33. W.B. Strong to Adams, March 30, 1886, Aug. 13, 1886, U.P., RG 3761, Box 44, F. 1 S6 2 S 1

⁶¹ For Atchison, Strong to Adams, June 28, 1886, U.P., R.G. 3761, Box 44, f. 1 S62 S1, Adams to W. Strong, Aug. 16, 1886, U.P., P.O., O.C., v. 36, ser. 2, r. 31. Missouri Pacific, Adams to Gould, Aug. 23, 1886, U.P., P.O., O.C., v. 36, ser. 2, r. 31. “Maddest,” Adams to J. Blickensderfer, Aug. 30, 1886, U.P., P.O., O.C. v. 36, ser. 2., r. 31. War into Africa, Adams to A.L. Wallis?, Jan. 4, 1887, U.P., P.O., O.C., v. 37, ser 2. R. 32.

⁶² Adams to F.L. Ames, Sept. 30, 1886, U.P., P.O., O.C., v. 36, ser. 2, r. 31. Adams to Callaway, Jan. 4, 1887, U.P. P.O., O.C., v. 39, r. 34, ser. 2.

1888 finished building across the corner of Kansas and into Colorado. Colby was one tier of counties short of the Colorado line; it was well beyond the 99th meridian.⁶⁴

Counting the original trunk lines, there were by 1889 seven separate lines run by six different companies in western Kansas between the Great Bend of the Arkansas River in the south and Nebraska border, an area about 120 miles wide.⁶⁵ Three of these lines ran to the Rocky Mountain Front or beyond. The only justification offered, besides the need to compete was in the words of P.P. Shelby, the General Freight Agent of the Union Pacific, was that “[i]mmigration will more than offset any decrease caused by new competing lines.” The railroads carried people into western Kansas, and then they carried them back out again. The railroads, always so eager to take credit for increases in population, in this case watched the population of western Kansas fall by nearly half between 1887 and 1897 as drought and depression struck.^{66*} Even Senator Ingalls of

⁶³ Adams to Sen. P.B. Plumb, Oct. 10, 1885, U.P., P.O., O.C., v. 30, ser. 2, r. 25, Adams to Poppleton, Jan. 2, 1885, P.O., O.C., v. 23, ser. 2, r. 20. Adams to S.R. Callaway, Jan. 11, 1887, U.P., P.O., O.C. v. 39, ser. 2, r. 34.

⁶⁴ For practice, A.L. Williams to Adams, Jan. 3, 1887, U.P. RG 3761, Box 57, f. 3. For changing and contradictory rationales for construction, Adams to Callaway, Aug. 31, 1885, Sept. 7, 1885, President’s Office, Outgoing Correspondence, v. 32, ser. 2, r. 27. Adams to Gould, May 10, 1885, U.P., P.O., O.C., v. 28, ser. 2, r. 24. Adams to Callaway, Jan. 7, 1887, U.P., P.O., O.C. v. 39, ser. 2, r. 34. Adams to Anderson, April 17, 1888, U.P., P.O., O.C. v. 43, ser. 2, r. 38. This was only part of the construction going on, Adams to Callaway, Oct. 8, 1885, *ibid.* The Missouri Pacific was also maneuvering east of Salina, which, of course, was encouraging competition. Adams to Callaway, Oct. 10, 1885, President’s Office, Outgoing Correspondence, v. 32, ser. 2. R. 28.

⁶⁵ Engineering News, July 20, 1889, Map no. 16, Southwestern States. Adams wanted the Central Branch, leased to the Missouri Pacific to build to Colby to exchange Colorado traffic, but when that failed he built by himself. Adams to A.L. Hopkins, Jan. 14, 1886, U.P., P.O., O.C. v. 30, ser. 2, r. 26. Adams cautioned against joining the Rock Island in building jointly to River Bend in Colorado. Admas to J.S. Cameron, March 23, 1888, U.P., P.O., O.C. v. 43, ser. 2, r. 38.

⁶⁶ For continued building, Adams to Callaway, May 15, 1886, U.P., P.O., O.C., v. 38, seri. 2, r.33. Lease of Central Branch, Adams to Perkins, Oct. 2, 1885, U.P. P.O., O.C. , v. 29, ser. 2. R. 25. For Shelby, “Freight Department (1885), P.P. Shelby in Freight and Passenger Earnings, 1885,” U.P., MS 3761, unnumbered box, p. 131. The western tier of counties in northwestern Kansas, Greeley, Wallace, Sherman and Cheyenne, all lost population between 1890 and 1900, as did the next tier, Wichita, Logan, Thomas, and Rawlins. In the next tier, Sheridan and Dectaur grew but Lane and Gove lost. All these counties were west of the 100th meridian. In the next tier just east of the 100th meridian, Ness lost population, Trego, Graham and Norton either gained or remained stable. In the next tier of Phillips, Rooks, Ellis and Rush, only Rooks lost population., and in the following tier of Smith, Osborne, Russell and Barton, only Osborne lost population. In the final tier of Jewell, Mitchell, Lincoln, Ellsworth and Rice, where Union Pacific

Kansas, the corrupt Candide of the prairies, admitted the result of expansion was that “[e]mpty railroad trains ran across deserted prairies to vacant towns.”⁶⁷ In 1878 Kansas had had 2,427 miles of railroad, about ½ the mileage of New England or New York.⁶⁸ By the end of 1890, Kansas had 8,900 miles of railroad, more than either New York (7,745) or New England (6,840). It had more railroads per square mile and more than four times the railroad per capita than New England, a region with more than three times the population.⁶⁹

Kansas was an exaggerated version of the West. The average number of tons carried per mile of railroad in the region south of Nebraska and east of Arizona peaked in 1886 at 1,482 and steadily declined to 1,312 by 1892. The receipts per ton mile also declined. The states to the north and west, where there was less building, did better, but even there the average number of ton miles stagnated after 1886 and plunged after 1892. In 1896 the western railroads carried fewer tons per mile than they had in 1887.⁷⁰

In 1888 Adams delivered a jeremiad to J.M. Wilson of the Union Pacific’s Board of Directors that could pretty much summarize the great expansion of the 1880s.

The railroad situation in my opinion is as bad as bad can be. I think we are all going to the devil, and going together. Nevertheless during the next six months, I think things will be better rather than worse. After that, the

expansion began in 1885, growth largely stagnated with only Mitchell losing population. Lincoln, the county that Adams placed such hopes in had a population of 8,582, 9,709, 9,886 in 1880, 1890, and 1900 respectively. McNall, *Road to Rebellion*, 79.

⁶⁷ John James Ingalls, *A Collection of the Writings of John James Ingalls: Essays, Addresses, and Orations* (Kansas City, Mo., Hudson-Kimberly Publishing Co., 1902), 478

⁶⁸ Henry V. Poor, *Manual of the Railroads of the United States for 1880* (New York, H.V. & H.W. Poor, 1880),v

⁶⁹ Henry V. Poor, *Manual of the Railroads of the United States for 1892* (New York, H.V. & H.W. Poor, 1892.)xxii.

deluge. I do not believe that there is any power on earth,--and certainly I am sure there is none in the heavens over the earth,--which can save from destruction a system which is managed on such vicious principles and is so devoid of all that basis of good faith by which only the business of civilized communities can be successfully conducted, as the railroad system of this country now is. It is plunging to destruction just as fast as it can go. The contempt I feel for the railroad men of this country as a whole I make no effort to express as language is wholly inadequate for the purpose. I should never have conceived it possible that a great system could have outgrown the men in charge of it as our railroad system has during the last twenty years. It is wallowing in the mire.”⁷¹

III Rationalizing Irrationality

The economist C. Knick Harley has advanced a clever explanation as to why railroads could not seem to abide a vacuum and engaged in what seemed premature and destructive construction. Harley argued that it is necessary to separate two different things—the actual building of a railroad and the exclusive right to build a railroad into a new territory—to understand why overbuilding occurred. The exclusive right to build a railroad was, in a sense, more valuable than an actual railroad in a newly settled agricultural region because an actual railroad in such a region would lose money until the population was thick enough to provide the traffic necessary to turn a profit. The right to build, however, allowed a railroad to refrain from laying tracks until population and

⁷⁰ *Poor's Manual*, 1892, xi. *Poor's Manual*, 1897, xvii.

⁷¹ Adams to J.M. Wilson, Nov. 5, 1888, P.O., O.C., v. 45, ser. 2, r. 40

economic activity had reached an optimally profitable point. Cooperation and respect of each others' territory remained the optimal strategy for the long run. In 1880 John Murray Forbes had succinctly stated the ambitions of the Chicago, Burlington and Quincy as : "PEACE, getting fair returns for capital and avoiding putting a cent more capital into the country than its real growth forces us to do at a profit." The C.B. & Q., however, became perhaps the most aggressive road in the West because, as in a game of prisoner's dilemma, while long run cooperation may have been the best strategy, the worst fate was to trust a partner who proved duplicitous. Under Charles Perkins the C.B. & Q. usually presumed duplicity.⁷²

In Harley's view agreements not to compete were inherently unstable because once settlement in regions without railroads reached a point where a railroad could make a profit, albeit less of a profit than if building were delayed, then it became impossible to hold territorial agreements together. The incentive to build into a rival's unoccupied territory, or into an occupied territory with an increasing population, was economically rational –a calculated response to rising costs of cooperation and the rising gains of "preemptive capture of unbuilt lines."⁷³

Harley, however, presumed several things that although possibly true of abstract and ideal railroads were not necessarily true of nineteenth-century railroads. First, he ignored the reality that many railroads remained largely speculative enterprises meant to make a profit through their financing. In such cases the actual state of development of the territory they built into was not their central concern. As C.P. Huntington put it in

⁷² Harley, "American Railroad Construction," *Journal of Economic History*, 798-803, 815-820. Forbes to Dexter March 6, 1880, CB& Q, B&M (Nebr.), 1870-79, New Lines 63, 1870, 6.9, Newberry. For an interesting analysis of business decision making and rational narratives, see Naomi R. Lamoreaux ,Reframing the Past: Thoughts about Business Leadership and Decision Making Under Uncertainty."

regard to the A.T. & S.F.'s Sonoran Railroad, as long as the A.T. & S.F. could "float securities so as to build railroads at a profit, their paying or non-paying after completion has very little to do with their building."⁷⁴ And since building a railroad increased land and mineral values in the area adjacent to it, there were always additional speculative opportunities for those with prior knowledge of a route.

Second, the creation of weak overcapitalized railroads created targets for railroads who thought they could build more efficient and less indebted lines. By building lines well under the cost of the original roads, the Chicago roads could undercut them and capture their traffic. This tactic, however, had a billiard ball effect. As each road lost traffic in one area, it ricocheted off to seek new traffic in another area. It was a battle between the Burlington and Wabash east of the Missouri in 1880* that prompted the Burlington to renew expansion west of the Missouri at the expense of the Union Pacific to make up for its losses.⁷⁵ This building culminated in the Burlington system reaching Denver in 1882.⁷⁶ In 1885 the Burlington chartered the Chicago, Burlington and Northern to build toward St. Paul; this was, in Adams' words, a shotgun fired into a hornet's nest and "opened a race of construction and counter-construction, attack and reprisal, which will change the whole map of that country." Adams told Charles Perkins that he thought it "one of the most ill considered railroad acts which have come within my range of observation."⁷⁷

⁷³ Harley, "American Railroad Construction," 815-820.

⁷⁴ Check which letter is correct, Huntington to Crocker, May 20, May 25, 1880, May 19 1881, June 6, 1881CPH r. 6, v. 28, ser. 2

⁷⁵ Endicott to Villard, Sept. 27, 1880, Villard Papers, 1862-1928, Mss. 899e v. 719. Box 84. Baker Library; loss, Adams to J.S. Cameron, May 17, 1888, U.P., P.O., O.C., v. 43, ser. 2, r. 38.

⁷⁶ For the roads comprising the Burlington system, see Henry V. Poor, *Manufal of the Railroads of the United States for 1885* (New York: H.V. & H.W. Poor, 1885), 650.

⁷⁷ Adams to Perkins, Oct. 14, 1885, Presidents Office, Outgoing Correspondence. V. 30, NS 15986 series 2 r. 25. Memo: re West Bound Canadian Freight Pool, n.d. c. July 1885, Letterbook 12: 512-18, MG 28 III

Third, it was not always established railroad corporations that decided to build. “Railroad sharpers” were ready to build a local line and then force one or another company to buy it to keep it out of a rival’s hands. Adams reported that the soil teemed with projects designed to get rival companies by the ears.⁷⁸ Such projects, in turn, were sweetened by bond subsidies voted by every Kansas town that wanted a road or competing roads.⁷⁹

Fourth, Harley assumed that managers carefully assessed the business their firms would gain or lose if they built. Although, as Alfred Chandler has argued, professional managers did act in response to rivals, they did not make their moves based “on any careful estimate of the demand for transportation.”⁸⁰ As the second building boom of the 1880s came to a close, Adams admitted that the Union Pacific had not taken enough time to get information about the regions in which they constructed railroads.⁸¹

Finally, Harley assumed that once a railroad expanded into a territory that could provide a modest profit, further expansion ceased until a similarly promising territory became available; expansion would not extend into far more sparsely settled regions. This was very often not the case, however, when building in Kansas triggered building farther west in Colorado, Wyoming, and Oregon, with companies seeking to compensate for losses elsewhere.⁸² Railroads could come less as opportunists than as refugees. When the Union Pacific broke up the Iowa Pool, Chicago roads prepared to build west of

20, vol. 2, C.P.R., National Archives of Canada.; Adams to Callaway, Oct. 12, 1885, President’s Office, Outgoing Correspondence, v. 32, ser. 2, r. 28.

⁷⁸ Adams to C.F. Morse, Sept. 8, 1885, U.P., P.O., O.C., v. 29, ser. 2, r. 25. Adams to Perkins, Sept. 25, 1885, Sept. 28, 1885, *ibid*.

⁷⁹ See J. Blickensderfer to Adams, July 9, 1886, U.P., MS3761 SG2 S1, Box 32, f. 4: Adams to Perkins, U.P., P.O., O.C. v. 29, ser. 2, r. 25. Adams to Lane, July 27, 1886, U.P., P.O., O.C., v. 36, ser. 2, r. 31. A.L. Williams to Adams, Dec. 15, 1886, RG 3761 Box 44 f. 5, S62 S 1.

⁸⁰ Chandler, *Visible Hand*, 170.

⁸¹ Adams to J.S. Cameron, May 17, 1888, U.P., P.O., O.C., v. 43, ser. 2, r. 38.

the Mississippi into territory “now controlled wholly by the Union Pacific.” As Adams wrote, should the C.B. & Q. and the Chicago & Northwestern “build into our territory, and we should have to sustain that loss... we would recoup ourselves by active development elsewhere.”⁸³ Conflict in one region had the disconcerting habit of spawning conflict in others.

The actual causes of overbuilding were less the rational calculations of managers seeking potential business for their lines and more either the speculative opportunities that expansion offered –either through financing or in allied speculations such as land and subsidies –or the response to such speculative building, which very often triggered an uncontrollable set of reactions. Speculation created weak and overcapitalized lines which tempted leaner rivals very often organized by men who had profited from earlier speculations. As revenue from their lines diminished under competition, the old overcapitalized companies seized new territories. Grenville Dodge, who became one of the few men Adams trusted, outlined the grandiose expansion from the northern plains to the Pacific Northwest that eventually debilitated the Union Pacific. Railroads caromed across the continent, creating systems that in toto made no rational sense but which could yield vast personal fortunes.⁸⁴

In the United States federal subsidies ceased in 1873 but local subsidies and national subsidies in Canada and Mexico remained an important catalyst for

⁸² Adams to G. Dodge, Sept. 2, 1886, U.P., P.O., O.C., v. 36, ser. 2, r. 31.

⁸³ Harley, “American Railroad Construction,” 798-803; Adams to G. Callaway, Sept. 12, 1884, Union Pacific, U.P., P.O, O.C, v. 24, r. 20. Adams to Callaway, Dec. 28, 1885, U.P., P.O, O.C, V. 33, ser. 2, r. 28. Adams to Storey, Jan. 14, 1887, U.P., P.O, O.C, v. 38, series 2, r. 33. See also Hughitt to Forbes, Dec. 4, 1881, Perkins to Forbes, Jan. 4, 1884, C.B. & Q. 33 1880 7.21 G.W. Holdrege to Perkins, May 17, 1884, C.B.& Q. 33 1880 7.2. When the Chicago and Northwestern built into Wyoming, the U.P. hoped to compensate in Oregon, bringing conflict with the N.P. Adams to Callaway, Nov. 10, 1884, U.P., P.O, O.C., v. 24, ser. 2, r. 27

⁸⁴ G. Dodge to Adams, Oct. 27, 1886, U.P. R.G. 3761, Box 38, f. 1, S62 S 1.

overbuilding. In 1876 Porfirio Diaz, who had received substantial aid from American investors seeking access to Mexico, seized power from the elected president, Sebastian Lerdo de Tejada. Although Diaz occasionally playing the anti-American card for domestic effect, he created the kind of oppressive order that American financiers appreciated. By 1896 the Mexican government had allocated subsidies in cash and bonds worth \$107,743,660 to the railroads.⁸⁵

Public goods –cash, securities, rights of way, and legal privileges –passed to private corporations while powerful public figures received private compensation in the form of cash, stock, and a share in land speculations that accompanied the railroads. When Diaz deposed Lerdo, Edward Plumb, as an ally of Lerdo, lost his role as intermediary between American investors and Mexican politicians, which went to John Foster, the American ambassador in Mexico City. Plumb, however, became the head of Collis Huntington's Mexican International. The Associates projected a road to reach from Eagle Pass, Texas to Mazatlán on the Pacific, but the road never made it farther than 350 miles, reaching Durango in 1892. Although Huntington claimed in June of 1882 that he had instructed John Frisbie, Jr., Diaz's railroad advisor and a man already on Huntington's payroll, not to bribe government officials, he sent Frisbie \$25,000. Frisbie, in turn, gave some of that to Ramón Fernández, governor of the Federal District and a close advisor to Diaz. Huntington created the usual insider construction company and, in the usual manner, he granted stock to José I. Limantour, Diaz's finance minister, Manuel

⁸⁵ Romero, Geographical and Statistical Notes on Mexico, 212.

Romero Rubio, Diaz's father-in-law, Ramón Fernández, and the wife of Geronimo Treviño, the governor of Nuevo León.⁸⁶

In Diaz's railroad sweepstakes the key concessions were the routes to Mexico City: The Mexican National and the Mexican Central. William Jackson Palmer and James Sullivan received a subsidy of \$11,929,870 in certificates convertible to 5% bonds to build the Mexican National from Laredo to Mexico City. Diaz adroitly deflected nationalist opposition by allowing the states to negotiate individual agreements with the new railroads. The Mexican National and the Mexican Central spent lavishly to the great advantage of local elites who realized how much they had to gain from American railroads. The Mexican Central, which would run from El Paso to Mexico City, went to men closely connected with the Atchison, Topeka and Santa Fe. For all practical purposes, it was the Mexican extension of the A.T. & S.F.. Its subsidy eventually totaled \$26,609,003.⁸⁷ In addition the A.T. & S.F., aided by a 7,000 peso per mile subsidy, built from Nogales to Guaymas in 1882, creating its first outlet on the Pacific.⁸⁸

Other Americans had their fingers stuck deep in the Mexican railroad pie, but they did not pull out such plums. With ex-President Ulysses S. Grant, whose income did not

⁸⁶ CPH to C. Crocker, June 4, 1881, CPH, r. 6, v. 28, ser. 2. Receipt, Stock, Pacific Improvement Company Collection, April 23, 1883, C.P. Huntington to John B. Frisbie, Aug. 25, 1881, Note of John Frisbie, NY, July 29, 1881, Copy of the agreement celebrated between Messrs. Frisbie and Fernandez., Nov. 16, 1881, "Agreement between the International construction Company and the Mexican International Railroad company, March 17, 1883, all in Mexican International Railroad Company, JL1, Box 2-12, Department of Special Collections, Stanford University. Hart, Empire and Revolution, 168, Don M. Coerver, "Federal-State Relations during the Porfiriato: The Case of Sonora, 1879-1884," The Americas, Vol. 33, No. 4. (Apr., 1977) 576.; CPH to Stanford, Feb. 2, 1881

CPH Papers, series 2, r. 6, v. 28. Huntington, also put U.S. General * Ord on his payroll. Ord had earned the appreciation of Diaz supporters by violating direct order to suppress Diaz's raids across the U.S. border into Mexico during Diaz's revolt. Hart, Empire and Revolution, 66-67

⁸⁷ The Mexican National Railway (Palmer-Sullivan Concession), 1881 (n.p.)APS Pamphlets Pertaining to Mexican Railroads, v. 2, # 15; Hart, Empire and Revolution, **; Huntington to Crocker, May 20, May 25, 1880, May 19 1881, June 6, 1881CPH r. 6, v. 28, ser. 2. Add Coatsworth on land ** Matias Romero, Geographical and Statistical Notes on Mexico (New York: G.P. Putnam's Sons, 1898), 196, 214-15. Ficker, "Economic Backwardness and Firm Strategy," HAHR, 279-282., 286-88.

meet his substantial needs, joining him in extolling Mexico's possibilities, Matías Romero attempted to form a grand alliance of American railway men to develop Mexico at the kind of banquet at Delmonico's in New York that came to serve as a symbol of the Gilded Age. Like all grand alliances of American railroad men, this one failed, but individual projects went forward. They resulted in a certain amount of commercial indigestion.⁸⁹

Not all of the failed projects in Mexico involved Jay Gould, but many of them did. Albert Kingsley Owen was a Greenbacker and a reformer, as befit the son of utopian reformer Robert Owen. He combined promotion of projected railroad route beginning at Presidio, Texas with a scheme for utopian colony at the railroad's terminus at Topolobampo on the Pacific Coast. Owens produced the colony, which among the quarreling and splintering that seem an essential part of utopias, continued into the 1890s. He never produced an actual Mexican railroad, but then neither did Gould or Grant.⁹⁰ Matías Romero had already secured a concession for a railroad from Mexico City to Oaxaca before coming to New York, and ex-President Grant, already living beyond his means, agreed to join him in that enterprise. The Mexican Southern got its charter in New York and Gould's cronies, Grenville Dodge and Russell Sage joined the road as vice-president and treasurer. Gould also promoted the International Mexican Railway Company (not to be confused with Huntington's Mexican International), a 680 mile road for which, according to an engineer sent out to examine its route, there was no business. Gould eventually merged it with the Mexican Southern. The Mexican Southern produced

⁸⁸ Robert A. Trennert, "The Southern Pacific of Mexico," *Pacific Historical Review* 35 (Aug. 1966), 265-66.

⁸⁹ Pletcher, *Rails, Mines and Progress*, 159-163.

⁹⁰ Hart, *Empire and Revolution*, 107-15; CPH to Crocker, May 9, 1881, CPH Papers, r. 6, v. 28, ser. 2

pamphlets* touting its promise and maps showing lines that did not yet exist. In 1884, a business partner of Grant's son in the firm of Grant and Ward squandered both the senior and junior Grant's investments and fled. Grant was left a bankrupt; the firm's creditors failed, helping to precipitate the Panic of 1884. Mexico voided the concession to the Mexican Southern.⁹¹

IV Profits of Overcapitalization

In both Mexico and the United States growth was not always a sign of strength; overcapitalization produced both growth and weakness. To a layman, explaining the weakness of a corporation by citing overcapitalization, would seem the equivalent of explaining a bankrupt by saying he had too much money. Overcapitalization seems like an oxymoron because in the vernacular most people think of capital as assets. For corporations and their accountants, however, capital actually represents their debt. When a person buys a bond or a share of stock, they are purchasing an asset, which they believe will yield them profits in the form of interest in the case of bonds and dividends or appreciation in the case of stock. The corporation selling financial paper is, in turn, taking on an obligation. They owe a bondholder the face value of the bond plus a stated amount of interest, all payable at specified dates. The stockholder owns a proportionate share of the company and is theoretically entitled to that share of its resources should the corporation disband and an equivalent share of any distribution of profits. Each security

⁹¹ Pletcher, *Rails, Mines and Progress*, 160-179. Romero, *Geographical and Statistical Notes*, 212; Klein, Jay Gould, 274-75, 306. Albro Martin, "Railroads and the Equity Receivership: An Essay on Institutional Change," *The Journal of Economic History* 34 (Sept. 1974), 696-97. Add Gorsuch

—each stock and bond—is therefore a claim against the corporation’s resources.⁹² In a well run corporation funded debt—money obtained from stocks and bonds --translated rather easily into “tangible assets, such as real estate, rails, locomotives and cars . . . good will . . . contracts, alliances, and reputation.” In short, all the assets of a corporation “intended for continuing productive use.”⁹³

But what if a corporation incurred debt and either got little or nothing in return? What if, instead of selling corporate stock, the company gave it away and instead of earning money to pay dividends borrowed the money that went as dividends to “investors” who had put little or nothing into the company? What if in selling bonds worth \$1,000, the corporation received only \$700 but for the next twenty or thirty years had to pay interest both on the \$700 and the missing \$300, and, when the bond came due, had to repay the \$1,000 it had never received rather than the \$700 it had actually received? What if a corporation routinely exchanged stocks and bonds to pay for goods and services at rates far higher than those goods and services were worth on the open market? And what if the people paid for these goods and services were also the men who ran the company? All of these instances and more led to corporations that had too much financial paper resting on too few tangible assets. This was what overcapitalization meant. The more capital that a company had, the more income it required to pay interest on its bonds and dividends on its stock. If the accrued debt had not yielded sufficient

⁹² William Z. Ripley, Railroads: Finance & Organization (New York: Longmans, Green & co., 1915) 53-54

⁹³ Ripley, Railroads, 54-55.

assets, a company was in trouble. A company with low capitalization requires less income to succeed than a rival with larger amounts of debt.⁹⁴

An overcapitalized railroad often lost money and ended up defaulting on its debts, but the men who overcapitalized the railroads often made fortunes. In the mid 1880s the Colton Trial provided a primer on how to profit from overcapitalizing a railroad; how, in effect, to put very little in and take very much out. When on November 14, 1883, the Colton Trial opened in Santa Rosa, the county seat of Sonoma County, California, it shared headlines in the San Francisco newspapers that day with the capture of Black Bart, “the notorious stage robber,” who had robbed his last stage a few miles from Copperopolis, California on November 3. The shared headlines were a nice coincidence because Ellen Colton, the widow of David Colton, one of the Associates, contended that Leland Stanford, Collis P. Huntington, Charles Crocker, and the estate of the by then deceased Mark Hopkins had betrayed her and left her “in the condition of a man attacked by a highwayman upon the roadside.” As it turned out, David Colton had embezzled from his fellow Associates, and the Associates had responded by taking from his widow securities – stocks and bonds – and leaving her, like the doggerel verses Black Bart left with the victims of his robberies, her dead husband’s worthless note for a million dollars.⁹⁵

The accounts of the trial focused on corruption: Colton’s defalcation (to use the preferred nineteenth-century term), the remaining Associates’ response, and the widespread payments to public officials that surfaced in the Colton/Huntington

⁹⁴ The Central Pacific claimed to have realized only \$744 for every \$1,000 in government bonds it received, although, as discussed below, these figures, like all railroad figures, are slippery. Pacific Railroad Commission, Testimony of Leland Stanford., July 29, 1887, 5:2527

correspondence that Ellen Colton's lawyers submitted as evidence. It was a trial full of sentimental Victorian nastiness. On his father's seventieth birthday, Colton sent him a touching note full of premonitions of Colton's own death. "Enclosed," he wrote, "please find a check for \$365, being a dollar for each day in the year that makes you three-score and ten." The check was written against the Rocky Mountain Coal and Iron Company, part of the Associate's properties that he managed. Colton had stolen his father's birthday present.⁹⁶

But buried deeper in the trial was a more revealing corruption. Among the securities Ellen Colton surrendered were those of the Western Development Company, which was the successor of the Contract and Finance Company. It was a construction company and a banking company that performed feats of financial magic. It concealed, transformed, and transferred assets so that debts incurred by the Associates' properties could end up as money in the pockets of the Associates. The Associates never paid for stock in the Western Development Company; instead they loaned funds, mostly securities, to the WDC, which paid them interest—as high as 12%—on these funds. The WDC, in turn, deposited these securities with the Central Pacific taking out cash in return. Thus unmarketable securities became cash without the Associates losing title and while gaining a lucrative income. The WDC, like the old Contract and Finance Company, was a screen to obscure the activities of the men who ran the Central Pacific

⁹⁵ San Francisco Daily Examiner, Nov. 14, 1883. Colton Case Testimony, VI: 2568-2569, 2818, 2822, 2872.

⁹⁶ In the Superior Court, County of Sonoma, State of California, Department no. 2, Ellen Colton vs. Leland Stanford, et al. Birthday, 8: 3555-3557.

and Southern Pacific from bondholders and bankers. The Associates kept virtually all the stock for themselves, although they often put it in other people's names.⁹⁷

Heavily indebted corporations yielded fortunes because promoters had learned that the value of stocks and bonds were not necessarily determined by what people would pay for them on an open market. The Associates, seemingly such ordinary, bulky Victorian men, were chimeras able to change form at will, and by changing form, they created value. As Colton's lawyers argued, the Central Pacific, the Southern Pacific, the Western Development Company, and others "were but convertible terms with these four or five movers in them, and they were fused constantly one into the other, and there was no distinction. The corporations were the individuals, and the individuals were the corporations."⁹⁸ The Associates proffered a deal, went to the other side of the table, put on another set of hats, and accepted the deal. In the books and ledgers of these companies trades that appeared to be between a wide variety of entities were not what they seemed.

Ellen Colton's lawyers sought to demonstrate how business was conducted in an internal house of mirrors that was but a miniature version of the larger house of mirrors in the financial markets. In 1871 the Central Pacific began to make deposits into various sinking funds, as required by law, to pay off its bonded debt. To keep the deposits from sitting idle, the Central Pacific starting in 1872 loaned the Western Development Company the money in the sinking fund at 10% per year. The loans went into the individual accounts of the Associates. As collateral for these loans, the Associates in 1875 transferred from their WDC accounts 17, 577 shares of Central Pacific stock.

⁹⁷ Colton to C. P. Huntington, Aug. 8, 1877, C. P. Huntington to Colton, Aug. 16, 1877, The Octopus Speaks, ed. Ramirez, 401, 403. Lavender, The Great Persuader, 300, 308, 328. Testimony of Frank Douty, July 30, 1887, Pacific Railway Commission, 5: 2682-2685.

⁹⁸ Colton Case Testimony, III, 1002.

Subsequent loans in 1876, 1877, and 1878 followed the same trajectory. By the end of its own corporate career in 1879, the Western Development Company had borrowed \$3,086,259.72 from the sinking funds. Most of the debt was settled by letting the Central Pacific keep the collateral⁹⁹ “Now as to the sinking fund,” Huntington wrote Colton, “we very likely have done what was best for us up to this time . . . ; but what we have done is not a thing to talk about, and I do not think there is a careful business man in the world outside of our five selves who would say it was well invested, while we know it is.”¹⁰⁰

The beauty of these transactions was that the Associates got cash for securities that could not be sold on the open market. Jay Gould testified that there was no market for either Central Pacific stocks or Southern Pacific bonds in the late 1870s, but that a limited market might have been established by a syndicate formed to buy the bonds and thus create a value for them. By transferring them to the Central Pacific, the Associates both got cash and still controlled the securities because they owned the Central Pacific. They quite literally had their cake and ate it too.¹⁰¹

Who was harmed by such a maneuver? “It may be a transaction open to censure by proper parties,” the Associates’ attorney Hall McAllister admitted. “It might be very pertinent with reference to parties who are interested in the Sinking Fund in calling these defendants to account.” But while bondholders might have reason to complain, Ellen

⁹⁹ Colton Case Testimony, III, 1011. Colton Case Testimony, I, 98-99, 228. Colton Case Testimony, I, 228-33; III 1015-16, 1022-1031; VI, 2632-33.

¹⁰⁰ Colton Case Testimony, III, 1011, 1015-16, 1022-31. Colton Case Testimony, I, 98-99, 228-33. Colton Case Testimony, VI, 2632-33. C. P. Huntington to Colton, Nov. 16, 1877, The Octopus Speaks, ed. Ramirez, 432. The sinking funds remained a source of corruption well after the Colton Trial. Charles Crocker Jr. in 1889 objected to Huntington’s “recent manipulation of the Central Pacific Sinking Fund,” by which 6% bonds were loaned to the Pacific Improvement Company in exchange for notes bearing 3% interest, thus transferring half the interest to the Pacific Improvement Company. Charles F. Crocker to CPH, July 26, 1889, CPH R. 48, ser. 1.

¹⁰¹ Colton Case Depositions (2 vols., 1883-1884) I, 3-12.

Colton did not. David Colton helped arrange these transactions. Betraying bondholders was not the issue in the Colton case. Ellen Colton lost.¹⁰²

Disguising the movement of money, however, also created unintended opportunities within the corporations for further fraud. As the Contract and Finance Company was being merged into its successor, the Western Development Company, Charles Crocker asked J. O'B Gunn to examine the books. The Associates had known what they did not want Congress to find in the old Contract and Finance Company books, but what Gunn found in the WDC books surprised them. It took Gunn only a few hours to find "where [John] Miller had stolen \$300,000." It took longer to find that as much as \$900,000 (the Associates made various estimates) was missing. John Miller, as it turned out, was not really John Miller, he was Ambrose Woodruff. The Associates got back roughly \$400,000, but the rest was gone for good. Miller/Woodruff had been a clerk for the old Contract and Finance Company and still had memoranda from those books. Since Miller/Woodruff knew too much, the Associates took back what they could get from him, and in Miller's words, "through the testimony of the witnesses from the railroad company I was declared innocent of all crimes." In his later testimony before the Pacific Railroad Commission Miller remembered their kindness. The Commission got little from him.¹⁰³ But then even an honest Miller might not have been able to follow the cash. William Mahl, sent out from New York to examine the Southern Pacific's books in 1889, found them virtually incomprehensible, a maze of changing accounting methods and divided

¹⁰² Colton Case Testimony, III, 998-999. Colton Case Findings, 16

¹⁰³ W. Milner Roberts to Jay Cooke, Jan. 1, 1872, Cooke Papers. CP. Huntington to H.E. Huntington, Jan. 5, 1898, HEH 4168, box 62, Henry *Collis P. Huntington Papers*; Colton Case Testimony, XI: 5048-59; San Francisco Call, May 14, 1884; Quote, Testimony of John Miller, Aug. 4, 1887, Pacific Railroad Commission, 5: 2888, also 2882-89. Miller's attorney testified that not much of an effort was made to convict Miller and that Miller had information damaging to the Associates, Testimony of N.Green Curtis,

responsibilities. Answering a simple question involved a tangled trail that went from ledger to ledger to ledger to ledger and then still more ledgers.¹⁰⁴

The profits from the stocks that the Associates retrieved from Mrs. Colton were still flowing in as the trial unfolded. Huntington anticipated a bull market with the end of the depression of the 1870s. He had done his best to make sure that the Central Pacific paid dividends in the 1870s, even if he had to borrow to do so. When Auditor Theos. French examined the Central Pacific's book in 1879, he found that it borrowed "money, ostensibly for investment in branch lines, steel rails, &c.," but "really for payment of dividends to stockholders," who were in 1879 the Associates. In the early 1880s the Associates issued \$5 million in new stock and put the money into the same general fund from which they paid dividends.¹⁰⁵

There were two reasons to borrow to pay dividends. The first was that it delivered cash to the Associates. The second was that when the Associates moved to sell their stock, the Central Pacific would appear to be a solid, dividend paying road. In 1880 Huntington began strategically selling, and when necessary buying back, small amounts of stock to create a market largely among European investors. Prices for Central Pacific stock went as high as 105 ½ in 1881, and Huntington had maintained them in the high 80s and low 90s as he disposed of the stock. He worked hard at it, and it irritated him that, as was so often the case, his Associates did not recognize his art.¹⁰⁶

August 8, 1887, Pacific Railroad Commission, 5:3030-3031, 3033. Testimony of James O'B. Gunn, August 9, 1887, Pacific Railroad Commission, 6:3092.

¹⁰⁴ William Mahl to Gates, April 12, 1889, CPH, R. 47, ser. 1

¹⁰⁵ French, Report of the Auditor of Railroad Accounts, House Exec. Document 1, 46th Congress, 2nd Session, 46; Testimony of E.H. Miller, Jr., July 28, 1887, PRC, 5: 2457.

¹⁰⁶ CP leases SP, Henry V. Poor, Manual of the Railroads of the United States for 1885 (New York: J.J. Little & Co., 1885), 864-65. S.P. leases C.P. Henry V. Poor, Manual of the Railroads of the United States for 1894 (New York, 1894), 810. Stock Listings, June 20, 1883 Clippings File, Council of Foreign

By 1883 in a brilliant if unscrupulous series of moves, Huntington finished selling out the Associates' majority interest in the Central Pacific, which then leased the Southern Pacific. The Associates held relatively few shares, and now the personal liability clause in California's corporate laws worked in their favor. The European shareholders who controlled the road delayed transferring the shares into their own names, fearing liability for the company's debt. The stock remained in the names of dummy stockholders designated by the Associates who, in turn, designated the Associates as voting proxies for the shares.¹⁰⁷

The Associates thus still controlled the Board of Directors in 1885 when they decided to reverse the lease of the Southern Pacific to the Central Pacific. They initially would have preferred to have the Central Pacific simply guarantee Southern Pacific bonds, but when this proved impossible, they had the Southern Pacific lease the Central Pacific for 99 years. The Associates thus reaped a fortune from the sale of their Central Pacific stock, maintained operational control of both the S.P. and C.P., and retained the ability to manipulate the traffic over them. They could and did divert transcontinental traffic to the Southern Pacific.¹⁰⁸ Since they no longer owned much Central Pacific stock, the Associates had no reason to borrow to pay dividends. The Central Pacific's dividend was cut in half for 1884 and then ceased entirely until 1888. When dividends resumed they were 2%, 1/3 its rate when the Associates were selling off their shares.

Bondholders, v. 17, 1st Ser., r. 226 "Central Pacific Railroad," Money, May 2, 1883, Clippings File, Council of Foreign Bondholders, v. 17: 115, 1st Ser. r. 226.

¹⁰⁷ Quote, CPH to Crocker, April 5, 1883, , ser. 2, r. 6, v. 30: 1001 CPH to Crocker, Feb. 11, 1880 CPH series 2, r. 6, v. 27; CPH to Crocker, May 3, 1880, CPH series 2, r. 6, v. 27; CPH to Crocker, Jan. 18, 1881, March 1, 1881, May 12, 1881, May 24, 1881, ser. 2, r. 6, v. 28; CPH to Crocker, Dec. 22, 1881, v. 29, ser. 2, r. 6; J.C. Stubbs to CPH, July 6, 1883, CPH Papers, ser. 1, r. 33. Augustus J. Veenendaal, Slow Train to Paradise: How Dutch Investment Helped Build American Railroads (Stanford: Stanford University Press, 1996), 24-25.

¹⁰⁸ T. Hopkins to CPH, July 23, 1883, CPH Papers, r. 33, ser. 1.

Prices for the Central Pacific fell as low as 26 by 1885 and then hovered in the 30s and low 40s. Too late, foreign investors realized that what had happened to them was more serious than the general decline of railroad stocks during the depression of the early 1880s.¹⁰⁹ It was not only Mrs. Colton who got robbed.

Plundering the Central Pacific created new opportunities for the plunderers. Coupled with the falling capital costs of the long period of deflation during the late nineteenth century, the money the Associates drained from the Central Pacific allowed them to transmute the Southern Pacific from merely a road to hold off Tom Scott into a new road capable of competing with other transcontinentals entering California. Lower prices on steel, labor, and new technologies meant new railroads could be built at less cost than the old, and local subsidies still remained to tempt new construction.

Jay Gould was a master at looting one railroad in order to develop others. He plundered the Union Pacific, loaded it with debt, and built a rival system around the Missouri Pacific. Charles Francis Adams inherited the fruits of Gould's manipulations. The "posture of affairs" of the Union Pacific was "to say the least, dangerous," he wrote John F. Dillon. "The difficulty of our position is simply this, that on any honest basis of capitalization the roads would, even at the lowest rate which has ever been proposed, return not only a fair, but a large profit. This, of course, is wholly between you and me."¹¹⁰ Gould rather disingenuously told the Pacific Railway Commission that the Union Pacific "would be all right if it were capitalized on a moderate basis," but it could not

¹⁰⁹ Adams to Geo. Edmunds, March 17, 1885, Adams to Colgate Hoyt, March 18, 1885, U.P., P.O., O.C., v. 28, ser. 2, r. 24. Henry V. Poor, *Poor's Manual of Railroads*, 1885, 866. Henry V. Poor, *Manual of Railroads*, 1886, xxiii. Henry Poor, *Manual of Railroads*, 1890, 1151.

¹¹⁰ Adams to Judge (Dillon), Dec. 30, 1887, Union Pacific, President's Office, Outgoing Correspondence, v. 42, ser. 2, r. 37.

compete with new roads costing \$12,000 per mile.¹¹¹ How the Union Pacific came to be overcapitalized was the question.

Charles Francis Adams and Jay Gould were sophisticated men; they knew that overcapitalization might seem to be only about numbers—the tallying of assets and debts—but that it was also about stories and the information they contained, about what numbers revealed and what they concealed. When Adams used words like “fair” and “honest,” his modifiers hinted at their opposite—unfair and dishonest—and a story Adams wanted kept quiet because acknowledgment of the road’s tainted past could do him no good. Gould, on the other hand, told stories, which was unusual. Adams, the Boston Patrician, was a man too often taken with his own cleverness. He often did not know when to keep quiet. Jay Gould, the New York speculator, was a famously quiet man. It was best to pay attention when both men acted out of character, and when Gould, in particular, was as oddly garrulous as he was in his testimony on overcapitalization.

Jay Gould, widely suspected of looting the Union Pacific, wanted to shift attention elsewhere, and so he told a story that made overcapitalization the story of risk, the monetary cost of a heroic past. When the Union Pacific was built, he told the commissioners, it paid “as high as \$5 or \$10 a piece for ties, and the iron rails, I think, cost \$300 a ton, and men had to take their lives in their hands to go out there. You know the Indians were after them.” With a minimum of 2,640 ties to a mile, Gould conjured up a road whose ties alone cost from \$13,200 to \$26,400 for each mile built. At Gould’s \$300 a ton, an additional \$26,400 worth of iron would be necessary to build a mile of

¹¹¹ Testimony of Jay Gould, May 19, 1887 U.S. Pacific Railway Commission, 1: 588. Overcapitalization was the common diagnosis. Edward Rosewater, the editor of the Omaha Bee and one of the Union Pacific’s most persistent critics, also identified overcapitalization—“fictitious values”—as the road’s key

road. The unassembled, ungraded road-- without spikes, wooden trestles, fishbars, bolts, buildings, ballast and all its other necessary elements-- already supposedly cost from \$39,000 to \$52,800 a mile. Listen to Gould's story, and overcapitalization was simple. The Union Pacific might as well have been originally built of gold. When pressed by an incredulous commissioner about the cost of the ties, which as it turned out actually cost from 65 to 90 cents apiece, Gould meandered off into a story about a scalped conductor.¹¹² The scalped conductor was real, but he was also an allegorical character in a parable about risk. The reason the railroad cost so much was that such a risky enterprise forced promoters to promise great rewards and pay high prices. Economists in more mundane ways still tell Gould's story. The high cost of capital in the Pacific Railway--the difference between the face value of securities and what people actually paid for them --can be taken as investors' rational calculation of risk.¹¹³

Gould knew all about risk, but Gould was also magician. Like any magician, he sought to create an illusion by attracting spectators' eyes to one thing and away from the action that actually achieved the desired result. Gould told simple stories of a heroic past, not complicated stories about exchanges of paper. Slight, perhaps smiling, speaking softly as he always did, the small, dapper man sitting at number 10 Wall Street told stories to the Pacific Railway Commission and performed railroad finance. Gould was, as usual, giving the information he wanted to give, withholding more, letting people draw

problem. Testimony of Edward Rosewater, June 28, 1887, U.S. Pacific Railway Commission, 3: 1349-51.

It was also a general criticism of anti-monopolists. Hudson, Republic and the Railways, 276-84

¹¹² Testimony of Jay Gould, May 19, 1887 U.S. Pacific Railway Commission, 1: 588. For actual costs, Testimony of James W. Davis, June 21, 1887, U.S. Pacific Railway Commission 3: 1087. The best American bar Iron was running between \$146 (its peak) a ton in 1865 and \$75 in 1870. Pig iron ran between a little under \$60 to a little under \$40 during this same period. Ties usually ran 25 to 50 cents.* Wellington, Railway Location, 1873, 763, 776. . In 1868 the Central Pacific calculated 88 tons of iron (at \$75 per ton) for rails and superstructure per mile, Testimony, Pacific Railway Commission, 8:4547.

their conclusions, thinking, with good reason, that those conclusions would not only be wrong but would forward his interests.

Gould drew attention to risk in order to attract it away from fraud. He focused on the late 1860s and not the late 1870s. That was the magician's trick. It concealed the secret that both he and Adams, in a rare moment of agreement, wanted kept quiet: overcapitalization was more the result of fraud, deception, and insider dealing than of entrepreneurial risk taking. Twenty years earlier Charles Francis Adams had argued that overcapitalization was a "tax on trade" to be paid eventually by the nation's consumers who would have to add bloated transportation charges onto the cost of goods so railroads could pay their interest and dividends on capital never actually received.¹¹⁴ Now Adams wanted to forget that fraudulent past. As if he could: every Union Pacific train carried its consequences, and every Union Pacific customer paid its freight.¹¹⁵

Pacific Railway Commissioner E. Ellery Anderson, a corporate attorney, gave the basic plot of fraudulent finance in his questioning of Leland Stanford in 1887. The techniques in the U.P. and C.P. were, after all, the same.

. . . it seems to be the general belief that the present weak condition of the Central Pacific Railroad Company is due to the fact that the contract with Crocker & Co., and the contract with the Contract and Finance Company, and the contracts with the Western Development Company, and the contracts with the Pacific Improvement Company have drained the

¹¹³ See for example, Robert Fogel, The Union Pacific: A Case in Premature Enterprise (Baltimore: The Johns Hopkins Press, 1960), 74-76.

¹¹⁴ Charles Francis Adams, Railroad Inflation, North American Review (January 1869) v. 108, 143-150

¹¹⁵ Klein, Union Pacific, 38-39.

company of its resources; that certain individuals have procured to be issued to themselves enormous quantities of stock and bonds of this company, and have paid dividends on the stock, and have made the interest charge on the bonds exceedingly heavy, and the origins of its difficulties lies there entirely, and nowhere else.¹¹⁶

Anderson's story of innumerable pieces of paper exchanged in extraordinarily complicated ways did not have the resonance of a scalped conductor.

Jay Gould was better at selling for very high prices financial paper that he acquired at very low prices than any man alive. In the wake of the Panic of 1873, he purchased stock in the Union Pacific, which was tottering on bankruptcy. In cooperation with Sidney Dillon, he immediately executed a scheme to save the road from defaulting on its bonds. He did so, characteristically, by having the president, Sidney Dillon, announce to the income bondholders that they would not be paid. Dillon offered to take their bonds in exchange for new sinking fund bonds at lower interest. This could have been a quite legitimate piece of finance, but Dillon and Gould secretly formed a pool to buy the income bonds that many holders were now eager to sell. They also secretly intervened in the market to boost the price of the sinking fund bonds. They took no risk. Union Pacific guaranteed that any losses the pool suffered would be made up by the company. It was a wonderful piece of insider dealing; the savings were used lower the floating debt.¹¹⁷

¹¹⁶ Commissioner Anderson, in Testimony of Leland Stanford, July 26, 1887, Pacific Railway Commission, 5: 2630.

¹¹⁷ Gould to Dillon, Aug. 21, 1874, enclosed with Dillon to E. Atkins, Aug. 21, 1874; Dillon to Elisha Atkins, Aug. 21, 1874, Dillon to Atkins, Aug. 25, 1874, Dillon to E. Atkins, Aug. 26, 1874, Dillon to E.

Gould and his allies controlled the Union Pacific for the rest of the 1870s, and Gould's supporters have claimed that he transmuted into a serious railroad man intent on making his money by creating a profitable road. The eventual rise in Union Pacific stock prices was supposedly the fruit of his success. Later managers of the road saw things differently. Gould boosted stock prices at the cost of the road's long-term health.* He eliminated the floating debt, cut expenses, and paid dividends, but the price was the deterioration of the road. He made a killing on the stock market and left a decaying and decrepit property to others.¹¹⁸

But the key obstacle to seeing Gould as man who built up rather than tore down properties was his acquisition of the Kansas Pacific. In a continent full of looted and mismanaged railroads, the Kansas Pacific may have been the sorriest of the lot. It had issued "stock and bonds of every possible description . . . to those concerned, up to the full estimated earning capacity of property," and, as it turned out, beyond. The result was numerous, contentious and divided claimants whose financial paper promised them assets and dividends that did not exist and who could not agree how to divide what did exist.¹¹⁹ What made this relict of greed and incompetence a threat to the Union Pacific was section 15 of the Pacific Railroad Act of 1864 that that gave the Kansas Pacific, and other branches of the Pacific Railroad, pro rata rates for traffic it shipped along Union Pacific tracks. A shipment on the K.P. destined for Ogden that joined the U.P tracks halfway between Omaha and Ogden should cost the Kansas Pacific rate plus half the fare the U.P. normally charged between Omaha and Ogden. The Union Pacific, however, charged its

Atkins, Sept. 18, 1874, Union Pacific, Office of the Vice President, Incoming Correspondence, Series 1 Sub Group 4, N.S. 16000, r. 1 Klein paints a somewhat different picture of this maneuver and does not mention Dillon's actions., Klein, Union Pacific, 312-13.

full rate on top of the Kansas Pacific fare. No shipper with a choice would pay such a premium, and the Kansas Pacific, losing traffic, pressed for enforcement of the law in Congress and the courts.¹²⁰

If the Kansas Pacific succeeded, it would harm the Union Pacific, and more critically for Gould, it would hurt Union Pacific stock prices. Gould's solution was to bring the Kansas Pacific and the Union Pacific under common ownership, and so in the service of making a killing on the Union Pacific, Gould began to invest in yet another mismanaged road. To do so, he had to make arrangements with Henry Villard who represented the largely German holders of the senior securities, and with the holders of more junior and less valuable securities. The Germans had a first mortgage on the last 245 miles of track that ran into Denver, a mortgage on half the company's lands, and a third mortgage on the rest of the road.¹²¹ The junior security holders controlled the stock as well as bonds with precious little security behind them.

Gould moved first to organize the junior security holders, who recognized that they were going to get neither the face value of their securities nor all the back interest due them. Instead, as Commissioner Anderson of the Pacific Railroad Commission later explained, they would put these securities "into a common fund and ascertain among themselves what each security was fairly worth, and scale them down in the reorganized system, taking some at 50 and others at 30 and others at par" In exchange, they received pool certificates. A settlement with the reorganized Kansas Pacific would

¹¹⁸ Poor's Manual of Railroads, 1877-78, 665. Klein, Jay Gould, gives a much more generous account of Gould's actions than I do here, 141, 145, 158.

¹¹⁹ Adams to O.H. Platt, Dec. 11, 1889, U.P., P.O., O.C. v. 49, ser. 2, r. 48.

¹²⁰ For pro rata, see also Grodinsky, Iowa Pool, 70-71. For such negotiations, see Villard to Greeley, April 26, 1875, Letterbook 17, Kansas Pacific Railroad, Villard Papers, and Dietrich G. Buss, Henry Villard: A study of Transatlantic Investments and interests, 1879-95 (New York: Arno Press, 1978), 72-79; Testimony of John B. Usher, July 8, 1887, Pacific Railway Commission, 3: 1695.

involve an issue of a new security that would be exchanged for those in the pool in proportion to each pool member's holdings. In Gould's words, this new consolidated mortgage would "fund all this heterogeneous mass of securities into one uniform security, and at the same time ... make a saving in the annual interest charge, and also in the principal of the debt."¹²²

This was initially a quite orthodox and responsible financial maneuver. Gould designed the so-called St. Louis pool to refund the stock and junior securities, reducing them from their par value of \$17,330,350 to \$4,855,300 and thus substantially lessening the capitalization of the company.¹²³ This was supposedly the diuretic that purged watered securities from the system. It was the bitter medicine that competitive capitalism demanded to keep healthy. There was, it seemed, a penalty for greed and bad management, and the security holders would pay it.¹²⁴

Unless the bondholders represented by Villard joined the pool, however, Gould's efforts were in vain since the Germans could foreclose on the most critical and valuable assets of the road. The negotiations between Gould and Villard in 1878 and 1879 devolved into something more resembling a street fight, but the struggle made Villard's reputation as a financier. Although Gould eventually succeeded in a suit to remove

¹²¹ Buss, Villard, 69-70

¹²² Russell Sage, Testimony, Pacific Railway Commission, May 12, 1887, Pacific Railway Commission, 1:346. Jay Gould, Testimony, May 17, *ibid.* 1:456

¹²³ Henry Villard, Testimony, May 14, 1887, Pacific Railway Testimony, 1: 428-35. Report of the Pacific Railway Commission, 1:56 For its overcapitalization, see Report of William Calhoun, Accountant, Pacific Railway Commission, (Washington, D.C., 1887) 8: 4891-4919. Henry Villard, Memoirs of Henry Villard, Journalist and Financier, 1835-1900, two volumes (Westminster, Archibald and Constable & Co., 1904), 2: 280-81

¹²⁴ For restructuring of railroads and their problems, see, Peter Tufano, "Business Failure, Judicial Intervention and Financial Innovation: Restructuring U.S. Railroads in the Nineteenth Century," The Business History Review 71 (Spring 1997), 8-19.

Villard as Receiver because of conflict of interest, Villard and the bondholders retained the power to foreclose and moved to do so.¹²⁵

Gould intended to demoralize the Germans, but the fight actually discouraged Gould's allies, the junior bondholders and stockholders. In March of 1879 Gould, seemingly magnanimously, moved to buy them out. He acquired a majority of the Kansas Pacific stock, which had been selling at anywhere from 3 to 12, for an average of 12 ½ cents on the dollar. In the spring of 1879, he withdrew the stock from the pool, while reselling shares of the remaining pool securities to associates such as Russell Sage, Sidney Dillon and Frederic Ames, all major holders in the Union Pacific.¹²⁶ Villard's bondholders really did not want to take over and run the Kansas Pacific, and so, although Villard regarded Gould as totally untrustworthy, he resumed negotiations.¹²⁷ Gould again offered Villard a share of the pool. By April negotiations had reached fruition as Gould granted the bondholders back interest and expenses. He recognized two of the three first mortgages in full and reduced the interest on the third only from seven to six per cent. There would be little water squeezed out from the first mortgages.¹²⁸

Gould now owned a bankrupt railroad, albeit one the St. Louis pool had supposedly purged it of excess capitalization, and he could pursue his original intent and

¹²⁵ Southmayd to Holmes, Sept. 5, 1878, Villard papers, Box 3 f. 26. Villard, *Memoirs*, 2: 282

¹²⁶ Russell Sage, Testimony, May 13, 1887, Pacific Railway Commission, 1: 362-63.

Henry Villard, Testimony, May 14, 1887, Pacific Railway Testimony, 1: 428-32; Buss, Henry Villard, 72-78.

¹²⁷ Henry Villard, Testimony, May 14, 1887, Pacific Railway Commission, 1: 429. Russell Sage, Testimony, May 12, 1887, Pacific Railway Commission, 1: 344. Sidney Dillon Testimony, May 5, 1887, Pacific Railway Commission 1: 198, 200-01. James Ham, Testimony, May 5, 1887, *ibid.* 1: 223-24 Villard to Endicott, Jan. 11, 1879. Villard papers, L.B. v. 32 Private Correspondence, Baker Library

¹²⁸ Jay Gould, Testimony, May 18, 1887, Abstract of Journal Entries Concerning the Kansas Pacific Pool, Sundries to 4th National Bank, March 7, 1879. Pacific Railway Commission, 1:497. Henry Villard, *Memoirs*, 282-83. Villard to Endicott, April 1, April 5, 1879, Villard Papers, Private Correspondence. L.B. 32; Villard to Wm. Endicott, March 7, 1879, Villard papers; Augustus Veenendaal, Jr., Slow Train to Paradise: How Dutch Investment Helped Build American Railroads (Stanford: Stanford University Press, 1996), 102. Jay Gould, Testimony, May 17-18, 1887, Pacific Railway Commission, 1: 465,

join it to the Union Pacific. Gould, however, changed directions. He had already successfully boosted Union Pacific stock from a low of 13 to around 80, and with a reviving stock market, he sensed new opportunities. He had second thoughts about merging the K.P. with the U.P. The U.P. would have to pay a premium.¹²⁹

Gould moved easily from being an agent of the U.P. to being an agent of the K.P. because he was always first an agent of Jay Gould. That he, Dillon, and Sage controlled the Kansas Pacific and were leading figures on the board of the Union Pacific did not excite any moral qualms in Jay Gould—but then few things did. Other members of the board, however, felt betrayed. In a stormy meeting in November of 1879 Gould offered the Kansas Pacific to the Union Pacific's Board of Directors. He demanded that a higher value be placed on Kansas Pacific stock than on Union Pacific stock so that he would receive more than one Union Pacific share for each share of Kansas Pacific stock that he surrendered. The Board, refused to pay a premium for stock in a road that over the previous ten years had on average not made enough money to pay the interest on its debt.¹³⁰ Gould told them they would be sorry, and they soon were.

Gould had two tools for inducing remorse. The Denver Pacific, which he had also acquired and which controlled the Colorado connections between the Union Pacific and Kansas Pacific, was the first one. His most powerful too, however, was the Missouri Pacific, yet another broken down would be transcontinental. Around it Gould grouped a collection of other roads that had proved chronically unable to meet their interest payments: the Kansas and Nebraska, which became the Kansas Central, the St. Joseph and Pacific, and the Central Branch of the Union Pacific, which was one of the original

¹²⁹ Buss, Villard, 72-78; Klein, Union Pacific, 318, 397-99

¹³⁰ Report of the Pacific Railway Commission, 58

independent chartered branches of the Union Pacific proper. Unprofitable as they might be, these railroads could threaten the Kansas Pacific and the Union Pacific. And in combination they could form a system that would rival the Union Pacific.¹³¹

Gould was playing a tricky game. He did not want to drive down Union Pacific stock, but wanted to give value to large amounts of Kansas Pacific and other securities that he could not dispose of on the open market. He had, it is true, bulled K.P. stock prices into the 80s by the end of 1879, and in January of 1880 it would vault above par. These prices reflected the expectation that the Union Pacific would acquire the K.P., and the rise was almost certainly the product of a “made” market: the prearranged sale of small amounts at inflated prices. Any attempt to unload large amounts of the stock would cause its market to crash.¹³² Most of Gould’s other securities were not even being sold on the stock exchange.¹³³ Charles Hassler testified before the Pacific Railroad Commission that quotes in the financial papers were “no guide at all” to actual prices. The only true guide was actual sales in some volume on the stock exchange. Quotes only signified that someone was putting in a bid for small amounts of stock in order to keep up the price, or that a single buyer was attempting to acquire a large numbers of securities. The idea was to peg a price higher and higher with nothing offered, until the “lambs” came in to try to make purchases thinking there was a real rise in value. Then some of

¹³¹ Jay Gould, Testimony 576, 579-80

¹³² Russel Sage, Testimony, May 12, 1887, Pacific Railway Commission, 1: 360. For stock prices in January of 1880, see Jay Gould, Testimony, May 18, 1887, Testimony, Exhibit no. 1, May 18, 1887, 492-95. Villard, Memoirs, 2: 282-83. Testimony of Leonard Smith, July 11, 1887, Pacific Railway Commission, 4:: 1722

¹³³ George Arents, Testimony, May 10, 1887, Pacific Railway Commission, 1: 266-67; John H. Haar, Testimony, May 14, 1887 Pacific Railway Commission, 1:405-408. Albert Rosenbaum, Testimony, May 6, 1887, *ibid.*, 246-55. Washington E. Connor, Testimony, May 13, 1887, *ibid.* 1:402. John H. Haar,, Testimony, May 14, 1887, *ibid.* 1: 407.

the securities could be unloaded to them at five to ten times their worth.¹³⁴ The rising quotes for Gould's stock were the equivalent of salting a mine.¹³⁵

In January of 1880 the Union Pacific and Gould resumed negotiations. Gould resigned from the board of the Union Pacific so that there would be no obvious conflict of interest in the sale of the Kansas Pacific. Dillon and Sage, however, remained on the Union Pacific board, which agreed to buy the Kansas Pacific, Denver Pacific, and Gould's smaller Kansas roads. The newly merged roads became the Union Pacific Railway Company to distinguish it from the old Union Pacific Railroad Company. The board then elected Gould a director of the new railroad.¹³⁶

The Union Pacific Railway exchanged stock in the new corporation at par for the stock of the Kansas Pacific and Union Pacific; it also issued additional stock that would be exchanged for Denver Pacific stock.¹³⁷ In buying the Kansas Pacific the Union Pacific assumed the Kansas Pacific's debts. These had supposedly been reduced by nearly 13 million dollars, but the water pumped out through the St. Louis Pool could be

¹³⁴ Charles W. Hassler, Testimony, May 14, 1887, Pacific Railway Commission, 1: 408-418

¹³⁵ George Arents, Testimony, May 10, 1887, Pacific Railway Commission, 1: 266-67; John H. Haar, Testimony, May 14, 1887 Pacific Railway Commission, 1:405-408. Albert Rosenbaum, Testimony, May 6, 1887, *ibid.*, 246-55. Washington E. Connor, Testimony, May 13, 1887, *ibid.* 1:402. John H. Haar,, Testimony, May 14, 1887, *ibid.* 1: 407.

¹³⁶ Jay Gould, Testimony, May 18, 1887, Pacific Railway Commission, 1: 514-18. Maury Klein, Union Pacific, 413-14. Russell Sage Testimony, May 13, 1887, Pacific Railway Commission, 1: 368-69; Testimony of Frederic Ames, May 20, 1887, 2: 666-67.

¹³⁷ These exchanges became a focus of the Pacific Railway Commission in 1887, which was understandably curious as why any corporation's directors would take on \$30 million debt by exchanging its stock at par for that of roads whose stock had been virtually worthless only a short time before. He didn't favor it, Russell Sage, replied. He and Gould testified that they would have preferred to keep the Kansas Pacific; they agreed to consolidate out of loyalty to the Union Pacific. They did it, Sidney Dillon and other directors replied, because of the threat that the Kansas Pacific posed to the Union Pacific. Nathaniel Niles, a government director replied that he wanted to harmonize the interest of the roads. Others members of the board couldn't remember why they voted for consolidation, or said they took the advice of Fred Ames or Dillon, or they were swayed by the Grenville Dodge and Solon Humphrey's report, a report commissioned by Jay Gould Sidney Dillon, Testimony, Pacific Railway Commission, 1: 210-11 Addison Cammack, Testimony, May 11, 1867, *ibid.* 277-81; Thomas Eckert, Testimony, May 11, 1887, *ibid.*, 283-84; Nathaniel Niles, Testimony, May 12, 1887, 1:334; Russell Sage, Testimony, May 12, 1887, *ibid.*, 1: 356-57, 370-71, 393-94; Jay Gould, Testimony, May 17, 1887, *ibid.* 1: 476-77, 482

pumped back in. When Gould and his allies created a new consolidated mortgage for the Kansas Pacific, the debt only shrank from \$27,727,350 to \$24,000,000 and its annual interest payments by \$452,134. The Union Pacific took on the Kansas Pacific bonds that Gould had issued to fund this debt. Ultimately the Union Pacific listed an increase in its funded debt of over 39 million dollars because of its acquisition of the Union Pacific. Much of the debt was owed to Gould and his associates.¹³⁸

The Pacific Railway Commission accountants later described the Kansas Pacific's books as "simply disgraceful," but they could trace enough transactions to show that Gould's profits had only begun with the rewatering of the St. Louis Pool and the exchange of previously nearly worthless Denver and Pacific stock for Union Pacific Stock. They found that in paying par (\$13,272,650) for securities in branch lines acquired by the Kansas Pacific for \$8,036,983, the Union Pacific added another \$5,235,666 of very expensive water to its capitalization. In the words of the accountants, the Union Pacific was "the loser to the extent of millions of dollars" in the consolidation. The accountants wavered between horror and admiration: "The controllers of the shares in the three companies constituted a ring which managed the business with highest skill and cunning."¹³⁹ With the stock market booming* and investors believing that the end of the Kansas Pacific's threat to the Union Pacific made the U.P. a stronger railroad, Union

¹³⁸ The Kansas Pacific's new capitalization was supposedly based on commutation values –the scaled value at which securities had been contributed to the St. Louis pool –but Gould and his associates received prices higher than the commutation values for their securities. They, for example, received \$3,400,000 for some pool securities whose commutation value was only \$2,242,420. Jay Gould, Testimony, May 17-18, 1887, Pacific Railway Commission, 1: 496, 532. Report of William Calhoun, Accountant, Pacific Railway Commission, (Washington, D.C., 1887) 8: 4809; Report of Pacific Railroad Commission, 56-57. Report to the Stockholder of the Union Pacific Railway for the Year 1880 (New York, 1881), Financial Statement 311. Of this debt, 10.3 million was held as security by Gould and Sage for Consolidated Bond holders and would be surrendered as the remainder of consolidated bonds were issued.

¹³⁹ Report of William Calhoun, Accountant, Pacific Railway Commission, (Washington, D.C., 1887) 8: 4809, 4820, 4824-27

Pacific stock remained high. Gould sold, as did Henry Villard, who had also speculated in Kansas Pacific securities.¹⁴⁰ Gould realized immense wealth from a railroad that he saddled with immense debts.¹⁴¹

Gould took his profits from the Kansas Pacific transactions and built the new system around the Missouri Pacific that the Union Pacific feared. As usual, Gould's enemies were not sure what he was up to; Collis P. Huntington thought he was only "as usual lighting down upon one thing [or] another and sucking some portion of its lifeblood, and then taking wing again for some other carcass."¹⁴² Huntington was wrong. By linking the Missouri Pacific, the Wabash, the KATY, and the Texas & Pacific, he was system building.

¹⁴⁰ Maury Klein defends Gould as ably as anyone could, but he dismisses what seems clear evidence that the rise in values of the securities that made Gould his money on the consolidation did not reflect any real market value, but instead Gould's characteristically brilliant manipulation of value through his control of information and insider dealings. Klein, *Union Pacific*, 414-17. He claimed, and those seeking to rehabilitate him have echoed his defense, that he did not have to sell to the Kansas Pacific to realize this money because the Kansas Pacific was actually selling higher than the Union Pacific, but this was disingenuous. The stock did rise like a rocket in 1879 and 1880, but it appears to have been a made market. At that point little stock was available. Brokers doubted that the market could sustain any large public sale of Kansas Pacific stock Oliver Ames, Testimony, May 31, 1887, Pacific Railway Commission, 2: 812-813 ; Jay Gould, Testimony, May 17, 1887, Pacific Railway Commission, 1:476

Artemas Holmes, Testimony May 10, 1887 (recalled), Pacific Railway Commission, 1: 267-276; Jay Gould, Testimony, Gould, May 18, 1887, 1: 504-505. Sidney Dillon, Testimony, May 5, 1887 *ibid.* 1: 207-08; James Ham, Testimony, May 6, 1887, *ibid.* 1: 236, 242.. Union Pacific officials claimed that they eventually made money off of the securities acquired from Gould, but they sold them only by guaranteeing their interest, see Ham testimony, also Amos Calef, Testimony, May 11, 1887, *ibid.*, 1: 317. For Oliver Ames and stock sale, Oliver Ames, Testimony, May 31, 1887 Pacific Railway Commission, 2: 807-12

¹⁴⁰ Report of William Calhoun, Accountant, Pacific Railway Commission, (Washington, D.C., 1887) 8: 4809, 4820, 4824-27

¹⁴¹ Russel Sage, Testimony, May 13, 1887, Pacific Railway Commission, 1: 383.; Jay Gould, Testimony, Gould, May 18, 1887, 1:524-28; Testimony of Oliver Ames, May 31, 1887, Pacific Railway Commission, 2: 812. The Union Pacific also purchased 7616 shares of the Central Branch from Gould to gain control of that road. They paid \$239 a share for a road whose liabilities were \$2,065,580 more than its assets, and which was \$1,476,687 in arrears on its interest to the government. Gould had bought the bulk of these shares from Oliver Ames at \$250, the remainder at from \$175 to \$100. The Union Pacific's purchase eliminated any loss Gould had incurred and then leased the road back to him

¹⁴² Huntington to Crocker, Nov. 3, 1881, v. 29, ser. 2, r. 6l; Huntington to Crocker, Jan. 7, 1881, CPH series. 2, r. 6, v. 28; Klein, Jay Gould, 240-42. Maury Klein sees Gould as being engaged in an enterprise with far reaching goals but so carefully disguised that his opponents could never recognize it. Gould was certainly capable of subterfuge and disguising his targets, but the system that emerged still seems more a product of expediency, opportunism, and financial creativity than the achievement of a strategic goal.**

Overcapitalized worse than ever, the Union Pacific staggered forward, but by 1884 it was in desperate straits. It continued to pay dividends and try to maintain stock prices by accruing a massive floating debt. Charles Perkins recognized that at a time when competitors were entering its territory and cutting rates, the U.P.'s "life depends on high rates more than that of any Company I know of." It refused despite losing its original constitutional challenge to the law in the Supreme Court, to pay into the sinking fund established by the Thurman Act to cover its debt to the government while it litigated other aspects of the act. In 1884 the United States agreed to delay enforcing penalties against the Union Pacific if Charles Francis Adams, already a director of the railroad, replaced Sidney Dillon, whom Adams privately referred to as "the old thief," as president. The alternative was receivership.¹⁴³ Adams then called on the personal credit of the U.P.'s executive committee to obtain the loans that saved the road.¹⁴⁴ Dividends ceased and stock prices fell. Adams first task was to convince the public and the government that the road was now in the hands of honest men, but to rescue the railroad and avoid antagonizing Gould and Sage, who were dangerous enemies, he was compelled to obfuscate or justify practices that he, as a reformer, had attacked.¹⁴⁵

¹⁴³ Klein, Union Pacific, 450-51, 454-57. Maury Klein, The Life and Legend of Jay Gould (Baltimore: The Johns Hopkins University Press, 1986), 331-32; Kirkland, Charles Francis Adams, Jr., 88-90. Adams to S.R. Callaway, Jan. 18, 1885, U.P., P.O., O.C., v. 30, s. 2, r. 27. Adams cast a more positive light on all this in a letter to his lobbyist, Moorfield Storey, intended for use in modifying the Thurman Act, Adams to Storey, Jan. 14, 1887, U.P., P.O., O.C., v. 37, s. 2 r. 33. Adams put the floating debt at \$11 million. Charles Francis Adams, Testimony Taken by the United States Pacific Railway Commission ...50th Congress, 1st Session, Ex. Doc. 51, pt. 2, (Washington: GPO, 1887) 1: 86.

¹⁴⁴ Adams to Henry McFarland, Aug. 13, 1885, U.P., P.O., O.C., v. 29, s. 2, r. 25. Capital began to dry up in 1882-83, and the markets broke in May of 1884. Little new construction began after 1883. Julius Grodinsky, Transcontinental Railway Strategy, 1869-93 (Philadelphia: University of Pennsylvania Press, 1962), 199-202. "old thief, Kirkland, Charles Francis Adams, Jr., 92.

¹⁴⁵ C.E. Perkins to Hughitt, Dec. 18, 1883, C.B.&Q. 33 1880 7.2, Adams to Isaac Bromley, Jan. 3, 1884 (misdated, 1885?), Bromley to Adams, Dec. 14, 1884, Dec. 19, 1884,. U.P., RG 3761, box 7, f. 24.

V Superheroes of Bad Management

When Gould wrecked the already damaged Union Pacific, he also helped create a monster in Henry Villard, who gained much of his reputation in the 1870s by recovering money for German investors that they had good reason to think lost forever.¹⁴⁶ Villard had thus gone up against two of the great freebooters of American capitalism: Jay Gould in the battle over the Kansas Pacific and, as the agent of the Frankfort bondholders in their attempts to recover their money from the Oregon and California, Ben Holladay .. Personally, they could not have been more different. Gould was small, quiet, dignified, and happiest with his orchids and his family. Holladay was, in Villard's description "a genuine specimen of the successful Western pioneer . . . illiterate, coarse, pretentious, boastful, false and cunning."¹⁴⁷ Villard bested Holladay, stripping him of his holdings and delivering control of his properties to his German employers. Gould's acquisition of the Kansas Pacific came at a price that satisfied the German bondholders. The rise in Kansas Pacific securities also netted Villard his first fortune, giving him a financial standing he previously lacked.¹⁴⁸

Villard went on to become a superhero of bad management-- powerful, daring, able to destroy railroads at a single blow. He encapsulated virtually everything that Charles Francis Adams saw as willfully destructive in western railroad building. Centering his investments on the Pacific Northwest, Villard gained control of the Northern Pacific and took a weak corporation and made it both bigger and weaker.

Bromley to Adams Jan. 3, 1885, U.P. RG 3761, Box 15 f. 24. Colgate Hoyt to Adams, Feb. 27, 1885, U.P. RG 3761, Box 19, f. 64.

¹⁴⁶ Testimony of Artemas Holmes, Pacific Railway Commission, 1: 132ff, gives an account of the tangled receivership.

¹⁴⁷ Villard, *Memoirs*, 2: 273, 283. Klein Gould, 244-45. Buss, *Villard*, 30-55, 78.

¹⁴⁸ Klein, Gould, ***; Buss, *Villard*, 43-55, 72-79. The fight with Gould was also international in scope, C.E. Bretherton to Villard, Jan. 10, 1878, Feb. 7, 1879, Feb. 26, 1879, Box 88 f. 641, Villard Papers.

For Villard to do this, he had to secure money from Europe, New England, and Wall Street, and he could do so because influential people in each of these places regarded him as one of them. His marriage to Fanny Garrison, the daughter of the abolitionist hero, William Lloyd Garrison, gave him New England connections that he cemented through the unlikely route of becoming secretary of the Social Science Association in Boston. This allowed Villard, who in his old age took to writing about himself in the third person, to undertake the “investigation and study of public and corporate financiering, including that of railroads and banks. The subject of railroad securities especially interested him.” Villard came to know Charles Francis Adams, who admitted his ability and never trusted his judgment, and William Endicott, a Boston banker and investor who was crucial to his enterprises.¹⁴⁹

But it was Villard’s German connections that proved the key to his success. Germans trusted Villard because he was German born, fluent in the language, and yet he was also familiar with American railroads and finance. He was admittedly fragile and prone to go to pieces in a crisis, but this was true of many of the men who operated in Wall Street and railroad circles. The obvious strengths of the charming, well-connected Villard masked his deficiencies.

Beginning in the late 1870s Villard, borrowing in New York and London, began assembling a transportation empire in the Pacific Northwest. He bought out successful firms, such as John Ainsworth’s Oregon Steam Navigation Company which controlled

¹⁴⁹ There are several accounts of Villard, but the best one for his connection of Europe and the United States is Dietrich G. Buss, *Henry Villard: A study of Transatlantic Investments and Interests, 1870-1895* (New York, Arno Press, 1978), 15-26. Henry Villard, *Memoirs of Henry Villard, Journalist and Financier, 1835-1900*, two volumes (Westminster: Archibald Constable & Co., 1904), 2: 270. For a typical Adams reaction to a Villard proposition, see Adams to Endicott, Dec. 18, 1885, No. 33 Summer (sic) St. Boston, U.P., Presidents Office, Outgoing Correspondence, v. 30, NS 15986 series 2 r. 26

the Columbia River, and unsuccessful firms like the Oregon Steamship Company, and, with the help of English speculators and investors, he acquired Holladay's old properties from the Frankfort Committee. Villard, and his representative Charles Bretherton, worked London, New York, Boston and Frankfort. He created the Oregon Improvement Company, which began building a line from Portland to the still uncompleted Northern Pacific at Wallula. When Frederick Billings, then president of the Northern Pacific and its largest stockholder, refused to sell that railroad and insisted on building to both Portland and over the Cascade Mountains to Tacoma, Villard countered with the famous Blind Pool. Participants invested in Villard, not knowing what he would do with their money. He acquired control of the Northern Pacific in the spring of 1881. Yet another new company, the Oregon and Transcontinental Company, became a corporate bag to hold the Northern Pacific, the O.S.N.C. and other Villard properties under a single ownership.¹⁵⁰

Villard knew about Wall Street and finance, but like most of the other financiers, he knew precious little about running railroads. As a corporate president, he ran, as one scholar has put it, "a loose, almost haphazard operation, almost totally unconcerned about cost accounting."¹⁵¹ He once summoned Col. George Gray to talk about branch lines, and then forgot to tell him the "chief point" for which he had summoned him.¹⁵² Villard loved to hear himself talk, and he savored the praise of others. His writing was really

¹⁵⁰ Frederick Billings to Villard, March 14, 1881, Bpx 43. f. 312, Villard Papers. Grodinsky, *Transcontinental Strategy*, 135-41, 203-208 Buss, Villard, 56-128. Villard to Bretherton, June 2, 1881, Villard Letterbooks, Private Letters, 40 A, 177-79; Villard to Oakes, Feb. 19, 1881, Villard Letterbooks, Private Letters, 40 A, p. 81-86

¹⁵¹ Buss, Villard, 98.

¹⁵² Villard to Col. Gray, Aug. 11, 1881, Henry Villard Papers, 1862-1928, Mss. 8993, v. 719, 1862-1928 Letterbook 46.; Villard to Gen. H. Haupt, July 30, 1881, General Manager, N.P., Henry Villard Papers, 1862-1928m Mss. 8993, v. 719, 1862-1928, Letterbook 46, p. 36. James A. Ward, *That Man Haupt: A Biography of Herman Haupt* (Baton Rouge: Louisiana State Press, 1973), 219

speaking, for he dictated his letters, which often ran from ten to twenty pages. His subordinates might not hear from him for weeks and then be buried under an avalanche of prose. “My multifarious business occupations do not permit me to follow up my correspondence regularly,” he explained to Herman Haupt, the General Manager of the N.P. who was trying unsuccessfully to install a system modeled after the Pennsylvania Railroad, “and I am compelled to avail myself of odd moments of leisure to attend to it. This I state simply by way of explaining the delay even in the acknowledgment of your letters.” However shaky his business skills, however careless about details, he was confident of his financial abilities. He was at home with the Northern Pacific.

As he patched this new organization together, Villard’s letters exuded a garrulous optimism. They were full of preening self-promotion. As an ex-journalist, he liked to quote others, particularly when they were full of praise for Henry Villard. During the good times, the letters virtually crowded. Making money seemed effortless, and Villard resurrected many of the old schemes of the transcontinentals. The Oregon and Transcontinental, acting like the Credit Mobilier or the Contract and Finance Company, would build branch lines for the Northern Pacific. The branch lines, organized as separate companies, would issue 6% bonds to pay the O. & T. twice the cost of construction as well as giving that company a majority of their stock. The O. & T. would, in turn, pay for the lines by issuing 5% bonds, the difference in interest in the bonds they were receiving from the branch lines represented further profit. The Northern Pacific would secure the deal by giving the branch lines traffic guarantees that would

yield the earnings necessary to enable them to pay the interest on the bonds. Success would bring rising stock prices and further profits. How could they lose?^{153*}

Well, they might lose because the Union Pacific was extending its lines into the Pacific Northwest with the Oregon Short Line and there was not enough traffic for both of them. To counter this, Villard spun further, but in this case abortive, plans. In combination with the Vanderbilt interests and the Chicago Burlington & Quincy, Villard would form a pool, acquire twenty millions of U.P. stock, enough to form a majority and put the Union Pacific “in harmony” with the C.B. & Q. and the Northern Pacific.¹⁵⁴

When things began to go sour, the letters grew even longer, full of explanations, self-justifications, and accusations. His close associate William Endicott was as early as 1882 worried about his financial maneuvers. He criticized Villard’s initial formulation of the pool to buy the Northern Pacific, and although Villard modified it, he insisted to Endicott that “sometimes rashness of this kind is really the greatest prudence.” Endicott protested Villard’s plans to sell bonds to raise money for dividends on stock, which, in turn, raised the price of the stock. He argued against using the solvent, low debt Oregon Railroad and Navigation Company to guarantee the debts of his more dubious acquisitions, weakening the O.R. & N. in the process.¹⁵⁵

In both good times and bad, Villard obfuscated and lied. The lies and their contradictions were often barely separated in the letterbooks. He had, he wrote Henry Higginson, promised to issue no new securities, and “ [w]hat I said was strictly true at the

¹⁵³ Villard to Oakes, July 18, 1881, Villard Letterbooks, Private Letters, 40 A, 188 ; Villard to Mr. Norris, July 23, 1881 , Villard Letterbooks, Private Letters 40 A, 198-208

¹⁵⁴ Perkins to Forbes, Aug. 25, 1881, Chicago, Burlington and Quincy, C.B.Q. F. 3.2-3.3.

¹⁵⁵ Villard to Endicott, Feb. 12, 1881, Villard Letterbooks, Private Letters, 40 A, p. 69 ff. Endicott to Villard, Feb. 14, 1882, Feb. 15, 1882, Jan. 3, 1883 Villard Papers, 1862-192, Mss. 899e v. 719, Box 84, Baker Library, f. 596

time,” but the situation had changed. There was always a “but” with Villard.¹⁵⁶ He would occasionally admit the falsifications, but they are necessary for the good of the company or required to defend against stock manipulations. It was necessary to maintain confidence. It was as if he was channeling Jay Cooke.¹⁵⁷

The core problem with the Northern Pacific was as simple as it was common; it cost too much to build, it had dubious financing, and it brought in too little revenue. Villard’s financial maneuvers made a bad situation worse. He sold bonds, and then he sold new stock. He borrowed more money, putting up stock as security. When the stock fell, the lenders wanted more collateral. Villard chose to intervene in the market to support the stocks, which cost still more money. Villard used his personal credit. As financial markets constricted and interest rates rose, the situation became desperate. Cynics said that although Villard had shown he could spend money, it was not yet apparent that he could make any. As it turned out, he could not. Yet Villard’s optimism and capacity for self-deception remained undiminished. It took in even the skeptical. Endicott. He repeatedly questioned Villard’s tactics but continued to encourage friends and clients to buy Villard securities into the disastrous summer of 1883. He pointedly asked Villard if there was any reason he should not give this advice.¹⁵⁸

It was not a good time to ask Villard anything. By the summer of 1883 he was operating in two parallel universes. The first was a world of public acclaim as he organized an elaborate and expensive excursion to the West to celebrate the completion of the Northern Pacific. He brought 300 guests from Europe and the United States at a

¹⁵⁶ Villard to Higginson, Nov. 1, 1883, Villard Letterbooks, Private Letters, 40 A, 328-331. For original letter see Villard to Higginson, Aug. 23, 1883, Villard Letterbooks, Private Letters, 40 A, 296-301

¹⁵⁷ See for example, Villard to Dolph, Oct. 6, 1882, Villard Letterbooks, Private Letters, 40 A, 239 -242

cost of approximately \$300,000 to join the Montanans who came to witness the ceremonial completion of the road. There were the usual politicians –Ulysses S. Grant, Secretary of the Interior Henry Teller, and Carl Schurz, the most prominent German American politician in the country. But there were also illustrious Europeans. The British parliamentarian and historian Lord Bryce advised Villard on the British delegation, which unfortunately included the young Lord Onslow, who having snubbed the journalists, became the running joke of the summer in American papers. “Our Noble Deadheads,” one newspaper called him and his companions, making them into archetypal British parasites and twits.¹⁵⁹ The great German social thinker Max Weber was there, as was the not so great American social thinker, E.L. Godkin, who edited the New York Evening Post, which Villard owned.¹⁶⁰

The guests were full of praise for Villard; this was why they had been invited. The journalists on the trip praised not just his vision but his integrity: “the best of your deeds is to have shown how, out of his own head, a man may coin millions for himself and for others without lowering his standard of high integrity or betraying the confidence of others.”¹⁶¹ The Germans and German-Americans sent him a letter calling the Northern Pacific one of “the great works of civilization by which not only this country but other nations will profit.”¹⁶² The guests on train four were, by these standards, subdued. They

¹⁵⁸ Endicott to Villard, Aug. 13, 1883, Villard Papers, 1862-1928, Mss. 899e v. 719, Box 84, Baker Library; Villard to Oakes, Dec. 16, 1883, Personal correspondence, Letterbook 51:477, Villard collection, Baker Library

¹⁵⁹ Utica Observer, Sept. 4, 1883, NY Tribune, Oct. 3, 1883, New York World, Oct. 13, 1883, Scrapbook Northern Pacific Opening Excursion, Sept.-Oct. 1883, Box 52 a

¹⁶⁰ List of German & British guests for 1883 Opening, 1883, Henry Villard Papers 1862-1928, Mss 8993v. 719, B. 32

¹⁶¹ Journalists to Villard, Sept. 18, 1883, f. 305, Henry Villard Papers, 1862-1928, Mss. 8993, v. 719, 1862-1928, b. 42

¹⁶² German and German American Guests to Villard, Sept. 15, 1883, f. 30, Henry Villard Papers, 1862-1928 Mss. 8993, v. 719, 1862-1928, b. 42

simply thanked him for the opportunity to witness “completion of the greatest commercial enterprise of history.”¹⁶³

The flattery of the guests paled before the demonstrations along the way, particularly those in St. Paul and Portland, the effective termini, and Tacoma, the terminus to be. The St. Paul celebration on September 3* with its parades, speeches and dinners set the extravagant tone for what followed.¹⁶⁴ The city of Bismarck celebrated with Sitting Bull and General Grant giving short speeches. As the party moved west, the Crow Indians encamped and staged dances for the party at Grey Cliff.¹⁶⁵ In Portland during a celebration that lasted September 10 and 11th, there was a large parade. There were, of course, soldiers and bands, and the Grand Army of the Republic and Mexican Veterans, but mostly there were people and floats representing commodities. There were blacksmiths and those who made tents and awnings, racing boats, boots and shoes, brushes, brooms and willow ware, carriages, cigars, lumber, sash and blinds. There were marchers with emblematic banners and floats representing coal, cooperage, flour, fish, harness, stoves, coffee and spices, brick machines and lime. There was the Fire Department, and a float with Diana the huntress to advertise furs and furriers. And then more craftsmen who made furniture, upholstery, gilt moldings, ice, and iron. There were 130 uniformed stevedores and a float with a pile-driving engine. Men marched who made mats, stucco, terra cotta, oil cloth, soda water, and on and on.¹⁶⁶

¹⁶³ Members of Northern Pacific Excursion, Train four to Villard, Sept. 12, 1883, Henry Villard Papers, 1862-1928, Mss. 8993, v. 719, 1862-1928, b. 42

¹⁶⁴ Minnesota Tribune, Sept. 4, 1883, Box 51 a., Scrapbook of Notices of the Northern Pacific Railroad Excursion, Aug. 29-Sept. 3, 1883 Villard 159

¹⁶⁵ Chicago Tribune, Sept. 2, 1883, The New York Sun, Sept. 6., 1883, Box 51 a., Scrapbook of Notices of the Northern Pacific Railroad Excursion, Aug. 29-Sept. 3, 1883 Villard 159

¹⁶⁶ Northern Pacific R.R. Last Spike Ceremonies, Programme of Exercises, Portland, Oregon, Sept. 10, 11, 1883, Scrapbook Northern Pacific Opening Excursion, Sept.-Oct. 1883 Box 52 a, Villard Papers

The great ceremonies at St. Paul and Portland book-ended the more ceremonial joining of the tracks on September 8, 1883 at the junction of Little Blackfoot Creek and Independence Creek sixty miles west of Helena. Fittingly, the completion was an illusion. The tracks had actually connected on August 22 at Gold Creek.¹⁶⁷ Endicott, with more admiration at the beginning of the summer than he would be able to muster at the end, had once written Villard that “I cannot quite make up my mind whether it is you or Barnum or Forepaugh that has ‘the greatest show on earth.’” I suppose that you have no doubt on that point.”¹⁶⁸ By the end of the summer Endicott had no doubt either.

For each public achievement and celebration there was, as a kind of counterpoint, a business disaster. By August the Northern Pacific and Villard’s other companies were sinking like stones on the stock market. As the line was completed and the excursion departed so did Henry Higginson. Endicott had reported him demoralized, and Higginson asked Villard to repay his loans. Immediately Villard responded in a huff: it was “just such a feeling of unfounded distrust as crops out in your letter which caused the entirely unwarranted break in our securities.”¹⁶⁹ As the journalists praised his integrity, Villard wheedled, obfuscated and lied. He maneuvered to hide the large interest charges on construction expenses, and he attempted to deceive investors into thinking that the expenses were a funded rather than a floating debt.¹⁷⁰

¹⁶⁷ Buss, Villard, 138-145; Chicago Interocean, Aug. 30, 1883 Box 51 a, Scrapbook of Notices of the Northern Pacific Railroad Excursion, Aug. 29-Sept. 3, 1883 Villard 159

¹⁶⁸ Endicott to Villard, May 23, 1883, Villard Papers, 1862-1928, Mss. 899e v. 719, Box 84, Baker Library

¹⁶⁹ Villard to Higginson, Aug. 23, 1883, Villard Letterbooks, Private Letters, 40 A, 302; Endicott to Villard, Aug. 24, 1883, Beverly Farm, Villard Papers, 1862-1928, Mss. 899e v. 719, Box 84 Baker Library

¹⁷⁰ Villard to Endicott, Aug. 18, 1883, Villard Letterbooks, Private Letters, 40 A., 289 -295; J.N. Tyndale to Villard, Aug. 30, 1883, Telegram., f. 304, Henry Villard Papers, 1862-1928, Mss. 8993, v. 719, 1862-1928, b. 42

The two worlds could not remain separate forever; they reunited when Villard returned east to face the financial crisis. He claimed simultaneously that anyone who had read the corporate reports would have known of the heavy cost of construction for some time, and so this could not be the reason for the stock's fall, and that he had not realized the extent of these expenses. In the kind of sentence that pretty much summed up his managerial style and that of many of his contemporaries, he wrote "the trouble was not only that the cost was much greater than was expected but that it was almost impossible to know at any one time what it would be. Hence it was unpractical to make provision in advance for current requirements and no measure of permanent relief could be resorted to until the whole of the road actually completed."¹⁷¹

Villard managed to be both rescued and disgraced. The banking house of Drexel-Morgan headed an investment syndicate whose loans saved the whole structure from collapsing. There was no room, however, for Villard in the new, enfeebled Northern Pacific. He thought of himself as a "tragic" figure. Officially he resigned, but actually, as the British press put it, he, "to use an expressive though unpolite English term, . . . was 'kicked out.'" He left under a cloud of mismanagement and financial irregularities, he was replaced by Robert Harris, who negotiated a pooling agreement with the Union Pacific to split the traffic from the O.R. & N. Co., which nonetheless soon became an object of rivalry between the two roads.¹⁷²

At the end of 1883, Villard, who always had "fits of nervous depression when the seasons change," wrote an *Et tu, Brute* letter to Endicott full of self-pity but not remorse.

¹⁷¹ Villard to Dolph, Oct. 8, 1883, Villard Letterbooks, Private Letters, 40 A, 311-324; Villard to Endicott, Nov. 7, 1883, Personal correspondence, Letterbook 51: 400, Villard collection, Baker Library

¹⁷² Adams to Howard Hinckley, Jan. 31, 1885, Adams to Harris, Feb. 16, 1885, U.P., P.O., O.C., v. 27, ser. 2, r. 23. Henry Villard, Memoirs, 2: 316. The Bullionist, Jan. 12, 1884, Clippings File, Council of Foreign

“I am already so accustomed to getting kicks and cuffs instead of thanks that I perhaps ought not to be surprised at the tone of your letter.”¹⁷³ He saved, eagerly, almost compulsively, the letters of condolence and praise he received in the wake of his downfall. They compose three thick files in his papers.¹⁷⁴ He retreated to Berlin with his family. He had not, as Adams wrote, “outgrown his grand ideas.”¹⁷⁵ Nor had he taken any responsibility for the failure. In a statement to the stockholders, he blamed it on the engineers, and the chief engineer, Adna Anderson, replied in outrage to “certain assertions that differ so widely from the actual facts.” Villard replied that he had no intention of blaming Anderson, and then blamed him anew. More controversy ensued. None of this was astonishing; what was astonishing was that he could ever again secure financial backing to return to not only railroading but to the Northern Pacific.¹⁷⁶

VI Pools

Overbuilding was the work of men with very large egos and very little accurate information. Like Villard, the men who controlled railroads did not so much have plans as convictions; they had fewer financial strategies than ambitions. William Strong, the president of the Atchison, Topeka and Santa Fe in the 1880s and a man unafraid of a double entendre, explained why his and other western roads extended their trunk lines and built large systems stretching off into the sunset: “[T]he power of a Railroad to

Bondholders, 18: 86, ser. 1, r. 226. Fred. Ames to Adams, April 30, 1885, U.P., RG 3761, Box 14, f. SG2 S 1 1885.

¹⁷³ Villard to Endicott, Nov. 9, 1883, Letterbooks, Private Letters, 40, 332; Villard to Higginson, March 26, 1883, Personal Correspondence, Letterbook 49: 225, Villard collection, Baker Library

¹⁷⁴ Files, 318, 319, 310 Henry Villard Papers, Mss. 8993, v. 719, Box 43, Baker Library

¹⁷⁵ Grodinsky, Transcontinental Strategy, 204-208. Buss, Villard, 151-168.; Villard, Memoir, 2; 316.. Adams to E. Smith, Nov. 28, 1885, U.P., P.O., O.C., v. 30, ser. 2, r. 26.

protect and increase its business,” he wrote, “depends upon its length, and the extent of the territory it can touch.”¹⁷⁷ These long trunk lines were spears, skewering a country and pinning it to a wall for later skinning and division. “A new line,” as Charles Francis Adams said of the Canadian Pacific, “claims all creation.”¹⁷⁸

But there was not enough business in this particular section of creation to sustain all these roads. Watching them careen across the Rockies filled Collis P. Huntington with astonishment. “[I]t is a great country west of the Rocky Mountains in acreage,” Huntington wrote ruefully, “and very few people on this side (the East) know how little business there is there.”¹⁷⁹ Jay Gould thought it would not be long before “another crop of receivers will be in court.” To Adams, who assumed control of the Union Pacific in the midst of the building, it was simply “a period of madness.”¹⁸⁰ Still, on they came. By 1885 it appeared that traffic “just sufficient” to maintain the Union Pacific and Central Pacific when they had a monopoly on the business in 1881 would have to support seven roads. The Union Pacific and Central Pacific had only 31% of the tonnage at the end of 1886. Lower rates would not increase the traffic sufficiently to restore the old business.¹⁸¹ The through business was by 1885 “rendered valueless by increased

¹⁷⁶ “Mr. Villard’s Defence,” *New York Daily Tribune*, Sept. 15, 1884; A. Anderson to Villard, Oct. 10, 1884, Villard to Anderson, Nov. 8, 1884, H. Thielsen to Villard, Dec. 13, 1884, Anderson to Villard, April 16, 1885, Villard Papers, Box. 43, f. 316

¹⁷⁷ Quoted in Craig Miner, *Frisco*, 122, from Boston Capitalists.

¹⁷⁸ Adams to Callaway, Sept. 8, 1886 President’s Office, Outgoing Correspondence, v. 38, r. 34.

¹⁷⁹ Perkins was sobered by the business potential of the Southwest. The only business was mines. Perkins to Forbes, June 30, 1880, J.M. Forbes, In-letters, private from C.E. Perkins, 3 F 3.2-3.3. Chicago, Burlington & Quincy Collection, Newberry Library, Chicago. Grodinsky, *Transcontinental Strategy*, 194-95. Huntington to Crocker, Dec. 8, CPH, v. 29, ser. 2, r. 6

¹⁸⁰ Adams to Callaway, March 18, 1886, President’s Office, Outgoing Correspondence, v. 33, ser. 2, r. 28. For Gould, L.S. Anderson to G.M. Lane, June 22, 1886, U.P. Asst. to Pres., O.C. v. 1, L.S. Anderson, r. 1

¹⁸¹ Adams to E.D. Sawyer, Feb. 13, 1886. President’s Office, Outgoing Correspondence, v. 34, series 2, r. 29.; Adams to C.P. Huntington, May 17, 1886, U.P., P.O, O.C. v. 35, s.. 2, r. 30. The seven routes in 1885 were 1) the U.P and C.P, 2) A.T.S.F. and S.P., 3) S.P. and T.P. 4) S.P. to New Orleans, 5) Burlington, D. &

competition.”¹⁸² It was so subdivided among competing roads that Adams estimated it formed but 5% of the Union Pacific’s entire business for 1885.¹⁸³ In Adams’ view, the transcontinentals were engaged in a Malthusian struggle.¹⁸⁴

As usually happened in the nineteenth-century, Malthus proved a bad prophet. Contrary to economic theory, competition did not lead to the demise of overcapitalized railroads. Overcapitalization proved a chronic rather than a fatal disease. Railroads fell into receivership, but the law preserved insolvent railroads as corporate zombies—the undead who could feed off the living. The original goal of receivership was to pay off a corporation’s creditors, and if the corporation died in the process, so be it. By the 1870s, however, the courts were reluctant to dismember roads to satisfy creditors. Selling a road off piecemeal would sacrifice, as a legal memorandum for the receivers of the Kansas Pacific put it, “the right of the public to claim the use and service of a Railroad upon offer of private compensation.”¹⁸⁵ While in receivership, a railroad continued to operate but was relieved of the immediate necessity of meeting part of its fixed costs –its interest payments. Receivers could thus lower rates further to increase their road’s traffic. Competitors had little choice but to respond with cuts of their own, which increased their own chances of receivership.¹⁸⁶

R.G., and C.P., 6) NP. 7) A. &P. and S.P. To these would quickly be added the Canadian Pacific and the Oregon Short Line. By the end of the decade? There would be the Great Northern. Exhibit 12, J.C. Stubbs, July 26, 1887, PRC, 5: 2598. For tonnage, Exhibit No. 12, July 26, 1887, PRC, 5: 2601.

¹⁸² Adams to Callaway, April 22, 1886, President’s Office, Outgoing Correspondence, v. 31, ser. 2, r. 23. Adams occasionally wavered and thought through traffic would improve, Adams to Callaway, Aug. 24, 1886, U.P., P.O, O.C., v.32, s.. 2, r. 27

¹⁸³ Adams to H. White, Dec. 3, 1885, U.P., P.O, O.C., v. 30, s. 2, r. 26.; Adams to Callaway, Oct. 10, 1885, U.P., P.O, O.C., v. 32, s. 2, r. 28. Grodinsky, *Transcontinental Strategy*, 165-66. The percentage for 1886 was 8%. Testimony of Oliver Mink, May 24, 1887, Pacific Railway Commission, 2: 624.

¹⁸⁴ Adams to E.D. Sawyer, Feb. 13, 1886, P.O., O.C., v. 34, series 2, r. 29.

¹⁸⁵ Memorandum, undated, unsigned, Villard Papers, Box 2, file 20.

¹⁸⁶ Charles Francis Adams, “Which Will Quickest Solve the Railroad Question,” 9. Charles Francis Adams, Jr., “The State and the Railroads” 354-55, bound in Adams, *Railway Pamphlets*, Stanford University Library.

In 1884 receivership underwent further evolution in the famous Wabash, St. Louis and Pacific Railway case. The Wabash was part of Gould's new system and like much of that system could not pay its debts. Its managers, not its creditors, sought court protection against impending mortgage foreclosures. The court not only granted protection; it made the managers the receivers. In the name of preserving the public's access to transportation, the legal pendulum swung to favor managers over creditors. Theoretically, this still should have allowed receivers, protected from suit, to squeeze creditors and eliminate water from the combination. The practice was somewhat more complicated. Major reorganizations before 1893 were as likely to increase fixed charges as lower them. Only after 1893 did they uniformly lower them.¹⁸⁷ Reorganizations, however, did tend to change the nature of the obligations. Firms in receivership restructured their debt to include innovative new securities such as income bonds, where payments depended on the earnings of the company, and preferred stock, which offered the holder priority payment of dividends –before common stock. Neither security guaranteed annual payments and thus served as protections against default.¹⁸⁸

Competition created a spectacle of a railroad dog chasing its own tail. Competition seemed to lead toward combination and monopoly, but the goal was never reached. All the process yielded was a crazed, emaciated, and vicious dog.

¹⁸⁷ Albro Martin, "Railroads and the Equity Receivership: An Essay on Institutional Change," The Journal of Economic History 34 (Sept. 1974), 685-709; William Z. Ripley, Railroads: Finance and Organization (New York, Longmans, Green and Co., 1915), 402-403. James W. Ely, Railroads & American Law, 177-180; Roy, Socializing Capital, 108-109. Gerald Berk, Alternative Tracks, 47, 51-55, 65 finds a reduction of 27% but he lumps the reorganizations before 1893 with those afterwards. Of the twelve major systems reorganized by receiverships between 1884 and 1900, six were major western systems: the Frisco, the Atchison, Topeka and Santa Fe, the Union Pacific, the Northern Pacific, the Denver and Rio Grande, and the Missouri, Kansas and Texas. Dagget, Railroad Reorganization, 356-57. Tufano, "Restructuring U.S. Railroads," 20.

¹⁸⁸ Peter Tufano, "Business Failure, Judicial Intervention and Financial Innovation: Restructuring U.S. Railroads in the Nineteenth Century," The Business History Review 71 (Spring 1997), 22-26.

Attempts to get out of this conundrum, to calm the dog, make it obedient to the public good, and have it prosper in the process, did not so much force the railroads into the political arena—for they had always been there—as force more and more people to think that the creation of predictable, fair, and reasonably efficient railroad transportation could not be left to competition and market forces. As I. Leo Sharfman of the University of Michigan would put it retrospectively in the early twentieth century “unregulated railway enterprise inevitably results in discriminatory practices.”¹⁸⁹ (*move to spatial politics?*)

The failure of pools to cure the evils of competition was perhaps clearest in the break-up of the transcontinental pool, whose very existence was a sign of the weakness of the transcontinentals. The key element of the transcontinental pool was the annual subsidy the railroads paid to the Pacific Mail Steamship Company to maintain rates. Fifteen years after the completion of the Pacific Railroad, the transcontinentals could not compete for freight with a route that used trains across the Isthmus at Panama to link steamships plying the East and West coasts. The Pacific Mail “could reduce the rate . . . until it would make the business worthless to us, and yet make something itself.”¹⁹⁰ When more and more transcontinentals reached the West Coast, they were unable to agree on the division of payments to the Pacific Mail. The transcontinental pool

¹⁸⁹ I. Leo Sharfman, Railway Regulation: An Analysis of the Underlying Problems in Railway Economics from the Standpoint of Government Regulation (Chicago: La Salle Extension University, 1915), 113.

¹⁹⁰ Julius Grodinsky, The Iowa Pool: A Study in Railroad Competition, 1870-84 (Chicago: University of Chicago Press, 1950), 39-40, 58. For early complaints, A.N. Towne to Huntington, Sept. 15, 1874, CPH R. 6, ser. 1. The subsidy took the form of the railroads buying up “a certain amount of space in the vessels of said steamship company.” Exhibit No. 7, Statement of J.C. Stubbs, July 26, 1887, PRC 5: 2573; Maury Klein gives a good account of the relations between the railroads and the Pacific Mail, Klein, Union Pacific, 289, 314-16, 388-89, 431, 472-74. Testimony of Charles Francis Adams, April 29, 1887, Pacific Railway Commission, 1: 110-111. Regular freight took two to three weeks to move across the continent on the railroads and about a month by the Pacific Mail. The Pacific Mail was particularly dangerous when Gould controlled both it and the U.P. CPH to Hopkins, April 19, 1875, Hopkins Correspondence, v. 7:

dissolved in February of 1886. By March transcontinental rates were in free fall, with rates on the Central Pacific and Union Pacific falling from 1.18 cents per ton mile in 1885 to .43 cents in April of 1886. A year later passenger rates between Los Angeles and Kansas City were \$1.00.¹⁹¹ The result, Albert Fink thought, was a “wholly unnecessary, thoughtless and unjustifiable difficulty.”¹⁹²

The rate wars soon became international. The management of the new Canadian Pacific thought they could capture not only the China and Japanese trade but also the transcontinental trade of the “chief cities of the United States, east of the Rockies.” The Canadian Pacific sought to use its “continuous line,” its “shorter rail distance and . . . its lighter grades” to absorb the added cost of steamship connections from British Columbia to San Francisco and other ports.¹⁹³ By January of 1887 the general traffic manager of the Canadian Pacific reported “a wholesale slaughter of rates and general scramble for business.” Rates plummeted, traffic increased, and net revenue fell. In 1886 the Union Pacific carried 35% heavier tonnage than the year before and made 26% less money.¹⁹⁴ The worst fears of railroad intellectuals seemed to be coming true across the West.

131-132, Timothy Hopkins Transportation Collection, Stanford Archives, M97. Huntington did not consider these subsidies, Huntington to Adams, May 18, 1886, U.P., RG 3761, Box 39, f. 5 S62 S1.

¹⁹¹ Kimball to S.R. Callaway, March 17, 1886, enclosure with Callaway to Adams, March 18, 1886, U.P., MS3761, SG2, S1, Box. 34, Folder 1: Callaway. Kimball to S.R. Callaway, March 22, 1886, enclosure with Callaway to Adams, March 23, 1886, U.P. MS3761, SG2 S1, Box 34, f. 2: Callaway, Traffic Manager to Editor of Railway Age, Jan. 7, 1887, , C.P.R. Van Horne Letterbook 20 pt. 1, MG 28 III 20, vol. 3, 48-49 National Archives of Canada. Memorandum, c. Oct. 1886, C.P.R. Van Horne Letterbook 18, pt. 2, MG 28 III 20, vo. 3, 965-66. National Archives of Canada. Keith L. Bryant, History of the Atchison, Topeka, and Santa Fe, Railway (New York: MacMillan, 1974), 97-105. Rates, L.S. Anderson to G.M. Lane, June 15, 1886, U.P., Asst. to Pres., O.C., v. 1, L.S. Anderson, r. 1

¹⁹² Adams to Hallgarten & Co., March 1, 1886, U.P., P.O., O.C. , v. 34, ser. 2, r. 29.

¹⁹³ Van Horne to Sir. John McDonald, Oct. 25, 1885, Van Horne Letter Book 14: 110-112, MG 28 III 20, vol. 2, NAC. Van Horne to J.J. Hill, April 21, 1886, Van Horne Letter Book 16: 268-70, MG 28 III 20, vol. 3, NAC. General Traffic Manager to Railway Age, Jan.7, 1887, Van Horne Letter Book 20: 48, , MG 28 III 20, vol. 3, NAC. The CPR, however, feared rail connections to Spokane as costing them more traffic than they would gain, Van Horne to P.v. Martinsen, Jan. 19, 1887 Van Horne Letter Book 19: 1000, MG 28 III 20, vol. 3, NAC

¹⁹⁴ S.R. Callaway to Adams, Oct. 19, 1886, U.P. RG 3761, Box 35, f. Aug. 11- Oct. 86, v. 53. S.R. Callaway to Adams, Jan. 8, 1887, U.P. RG 3761, Box 47, f. 3. Adams to Callaway, March 29, 1886,

President's Office, Outgoing Correspondence, v. 33, ser. 2, r. 28. Testimony of Charles Francis Adams, April 29, 1887, Pacific Railway Commission, 1: 112.; Partial Memorandum, 1886 Van Horne Letter Book 18: 965-66, MG 28 III 20, vol. 3, NAC ; General Traffic Manager to Railway Age, Jan.7, 1887, Van Horne Letter Book 20: 48, , MG 28 III 20, vol. 3, NAC