Frederick West Lander and the Pacific Railroad Movement

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Article Summary: Lander proposed a central rather than a northern or southern route for the transcontinental railroad. He wanted to build the lines in a slow, evolutionary process. The railroad used his route but opted to build as rapidly as possible.

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Names: Frederick West Lander, Isaac Ingalls Stevens, William Magraw, John Moffett

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A CENTURY ago plans for building a railroad to the Pacific coast occupied a prominent place in the popular imagination. Sanguine projectors never tired of enumerating the benefits which they believed were certain to follow the completion of such a project. Not the least of these envisioned advantages was national unity, the necessary concomitant of a national railroad, a unity transcending sectional bias. But contrary to visions and hopes, plans for this great western road merely added fuel to the fires of sectionalism until even the soundest proposals were consumed by the flames. This was the paradox of the Pacific railroad movement prior to the Civil War; it was also its tragedy, for the need for rapid transcontinental communication became more apparent with every creak of a wagon wheel lumbering slowly westward.

Asa Whitney and other early projectors had urged that the commercial benefits to be derived from Asiatic trade were alone sufficient justification for a transcontinental railroad. However, the rapid development of the American West during the first few years following the settlement of the Oregon question, the outbreak of the Mexican War, and the conquest of California supplied new and more tangible reasons for extending railroad lines to the coast. The newly

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acquired possessions had to be defended militarily and their growing population provided with more efficient communication with the East. Moreover, the apparent mineral and agricultural wealth of far western areas added cogency to arguments that such communication would be self-supporting.  

Armed with these and other considerations, advocates of a transcontinental railroad urged upon Congress the enactment of necessary legislation. Particularly determined were those most directly concerned, the people of the Pacific coast. They used all the standard arguments for railroad transportation and added the threat of disunion if it were not provided. Their interest in the overland railroad was reflected in the energetic activities of California senators and congressmen in its behalf. Yet there was hardly a state in the Union that did not commit itself to a favored project, and hardly a city that did not have its enthusiasts who contributed their share to the Pacific railroad movement. Prolonged and diligent though these efforts were, however, obstacles were too many and too great. Thus hundreds of memorials, petitions, and bills brought to the attention of Congress proved abortive.

Party politics did little to smooth the way for legislation. Whigs and Democrats split on questions concerning the power of the federal government to charter a company to construct the road, the problem of its operation within states as well as within territories, and the extent of money appropriations. These issues even transcended party affiliation to the degree that neither party was able to unite on any specific project. The solid backing tendered a central or northern route by the Republican party did not insure construction, for the new party was sectional in composition.

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and was not able to muster enough strength to override southern opposition.\(^5\)

The labyrinth in which Pacific railroad advocates found themselves contained additional baffles. Federal aid was regarded as essential to finance construction, and the most common proposal was that the federal government grant to builders alternate sections of land along the right of way. These could be sold, it was urged, and the proceeds used to pay for the railroad. The remaining lands would then be doubled in value and the government would lose nothing. Yet the plan drew fire, not only from strict constructionists who believed it to be unconstitutional, but also from landless states who wanted the proceeds from public lands divided among the several states, and from western advocates of free lands. The tariff was drawn into the controversy when the friends of the iron industry countered a proposal that iron be admitted duty free by insisting that only American iron be used in construction.\(^6\)

Far and away the greatest obstacle in the way of Pacific railroad legislation, however, was the inability to agree upon a route or routes. The rivalry between North and South was intense, for it was generally believed that if a southern route were selected, the trans-Mississippi territories would become primarily southern in population, sympathy, and institutions. If a northern route were chosen the reverse would be the case, and the political balance weighted in favor of the North.\(^7\) The Southerner's fear that his section would fall behind the North politically was sustained by the conviction that it had already fallen far behind in industry, commerce, and population. For this reason southern leaders were especially aggressive in their insistence upon the southern route. The Pacific railroad, they maintained, would aid in the regeneration of the South.\(^8\) The bifurcation between North and South was nevertheless only one aspect of rivalry over the choice of route. The

\(^{5}\)Ibid., p. 201.

\(^{6}\)Ibid., p. 198; Russel, Improvement in Communication, pp. 28-33.


\(^{8}\)Ibid., pp. 24-25; Albert L. Kohlmeier, The Old Northwest as the Keystone of the Arch of American Federal Union (Bloomington, Indiana, 1938), p. 136.
West, too, was divided according to local interest. Almost every hamlet as well as every major city in the Mississippi Valley trembled in anticipation of its future importance should it be chosen as the eastern terminus of a railroad to the Pacific.\(^9\) One group favored a route from Lake Superior through Minnesota to Puget Sound; another had eyes only for a line running westward from Chicago through Iowa; citizens of the Ohio Valley did not see how St. Louis could be improved upon as a terminus; various southern interests suggested Memphis, Vicksburg, New Orleans, or Galveston as logical starting points.\(^10\)

With individual representatives in Congress aware of the preferences of their constituents, it is not surprising that a Pacific railroad bill was not enacted before 1862. On the contrary, it is astonishing that so much was accomplished and that some bills came so close to being passed.\(^11\) Particularly noteworthy among the achievements, at least to contemporaries, was the appropriation of $150,000 for surveys of possible routes.\(^12\) Jefferson Davis, as Secretary of War, assumed direction of the gigantic undertaking, and he immediately set about assigning responsibilities to hand-picked subordinates. Isaac Ingalls Stevens, West Point graduate and newly-appointed governor of Washington Territory, took charge of reconnaissance along the northern route.

In his party was young Frederick West Lander, a New Englander by birth and an engineer by profession, a man destined to play an important part in the development of transcontinental communications. Born in 1822, Lander came from a long line of Massachusetts sea captains; his grandfather, Captain Nathaniel West, had commanded the

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\(^10\)Kohmeier, *The Old Northwest*, p. 135.


\(^12\)As it turned out, the appropriation was far from adequate. The cost for reconnaissance was $340,000, and an additional $890,000 was required to print the reports. Russel, *Improvement in Communication*, p. 196; *Cong. Globe*, 33 Cong., 2 sess., p. 239.
privateer “Black Prince” during the American Revolution.\textsuperscript{13} Powerful in physique and athletic in bearing, Lander might well have passed for a black prince himself. In describing him, one of his acquaintances wrote that “his movement was very peculiar. Above middle height, and most powerfully built, he looked both active and indolent, both stately and careless. It was something between the complete soldierlikeness of a Knight Templar and the covert agility of a panther on a prowl.”\textsuperscript{14} This giant of a man had received a technical education at Major F. A. Barton’s engineering school in South Andover and had served as assistant engineer on railroad surveys in Massachusetts.\textsuperscript{15} Had he been a conformist, Lander would have followed the commercial aristocracy from ship to factory. He chose instead the American frontier as the stage on which to play his part, and the performance brought cheers from most observers.\textsuperscript{16} The role was a hazardous one; in the course of his career his left arm was broken twice, his shoulder was injured so that it repeatedly became dislocated, and his collar bone and three ribs were also fractured. Yet his strength remained Herculean.\textsuperscript{17}

After completing his duties on the railroad reconnaissance in 1854, Lander returned to the East where he was again engaged as a consulting engineer.\textsuperscript{18} Two years later

\textsuperscript{13}Unidentified clipping in the Lander Papers. The Lander Papers are in the Library of Congress. The author used microfilm copies in the Indiana University Library, Bloomington, Indiana.

\textsuperscript{14}Clipping in the Lander Papers taken from an article by N. P. Willis in the \textit{Home Journal}, n.d.

\textsuperscript{15}William Arba Ellis, \textit{Norwich University, 1819-1911, Her History, Her Graduates, Her Roll of Honor} (Montpelier, Vermont, 1911), p. 337. Grisly evidence of Lander’s size may be inferred from an unidentified clipping inserted after his death in the Lander Papers: “A Washington correspondent gives the following account of the process of embalming adopted there: The body is placed in an inclined platform, the mouth, ears, nose &c., are stopped with cotton; if wounded, cotton is put in the wound and a plaster is put on; an incision is made in the wrist, the attachment is made from an air pump, and fluid injected throughout the arteries...The bodies take, on an average, about seven quarts, but Gen. Lander’s took seventeen quarts...”

\textsuperscript{16}E. Douglas Branch, “Frederick West Lander, Road Builder,” \textit{Mississippi Valley Historical Review}, XVI (September, 1929), 172.

\textsuperscript{17}Clipping referred to in note 13.

\textsuperscript{18}Logansport, Indiana, \textit{Pharos}, October 9, 1855.
he was asked to return to government service, this time to act as civil engineer on the Fort Kearny, South Pass, Honey Lake Wagon Road. The following year he became superintendent of the road, not without some ill feeling on the part of his former chief, William Magraw. The two men actually came to blows in the fall of 1858 and again during the next off season. Yet Lander had the full support of Secretary of Interior Jacob Thompson. And every spring, leaving his private feud behind, he set out along the wagon road, exploring adjacent territory, shortening the route, grading and improving water holes. He made, in all, four such transcontinental junkets for the Department of Interior and emerged after his resignation in 1861 as a recognized authority on the terrain between Council Bluffs and the California border.  

Lander was never unilateral in his interests, however. His reputation as a gentleman suffered little from his bouts with Magraw, and everywhere he went "he basked in gratifying social eminence." He had a penchant for versification and was one of the charmed circle frequently entertained by the poetic sisters, Phoebe and Alice Cary. His lecture, "The Aptitude of the American Mind for the Cultivation of Fine Arts," delivered before the Washington Art Association, was well received by both the audience and the press. And when Lander married, it was a well-known actress, Jean Margaret Davenport, who became his wife. Nevertheless, the subject which Lander found most engaging had little to do with aesthetics or even directly with a wagon road.

All his other interests were subordinate, even though they may have been contributory to the building of a transcontinental railroad, the apex of his ambitions. In the seven years from 1854 to 1861, Lander evolved plans for the fulfillment of his grand objective. These differed in many respects from plans of other prospective railroad builders.

21The Lander Papers, passim.
Lander was acutely conscious of conflicting attitudes toward the road, and he labored incessantly to reconcile differences. His first step down the via media was his choice of a central rather than an extreme northern or southern route. Inspection of the northern route inspired in Lander none of the crusading zeal which characterized Governor Stevens' reports. On the contrary, after the Stevens party reached the coast, consulting engineer Lander hardly stopped to shake the dust from his boots before he was off on a reconnaissance of his own. He did, however, take time to secure approval of the Washington territorial legislature, together with a resolution by that body that he be reimbursed for his expenditures.\textsuperscript{22}

In March, 1854, then, Lander set out to trace a route via the Snake and Bannock rivers, South Pass, and the Platte to the Missouri River. Five of his six aides found the rigors of the passage too demanding at that time of year. They turned back, leaving only John Moffett to accompany his chief.\textsuperscript{23} A grim notation at the foot of a clipping in Lander's scrapbook describes Moffett's fate: "Dead from exposure." But Lander himself was not to be deterred by hardship. He had been over the South Pass route, and had seen that it was good. From that time until the rumble of cannon heralded the opening of the Civil War he never relaxed his efforts to bring his convictions to the attention of the public.

In the report on his reconnaissance of 1854, Lander held that the choice of route should be subordinate to one primary consideration: which route would be best adapted to the kind of line needed at that time. His most novel proposal was that the construction of a railroad should pro-

\textsuperscript{22}Lander, Synopsis of a Report of the Reconnaissance of a Railroad from Puget Sound via South Pass to the Mississippi River (Washington, D. C., 1856), p. 1. The legislature of Washington Territory also passed a resolution that Lander's report be printed with the reports of government surveys. On August 3, 1854, James A. McDougal made a motion to that effect in the House. It passed, and Lander submitted his report to Jefferson Davis. It was printed originally in House Ex. Docs., No. 129, 33 Cong., 1 sess. Substantially the same material may be found in Senate Ex. Docs., 33 Cong., 2 sess., XIII, Pt. 2, and House Ex. Docs., 33 Cong., 2 sess., XI, Pt. 2.

\textsuperscript{23}Branch, "Frederick West Lander," p. 174.
ceed by evolutionary processes. "A wagon road," he wrote, "a rough, rapidly extended railroad, suited to military and mail transportation and an elaborately completed, thoroughly equipped Grand Trunk railroad can each exist...as called for by the necessities of civilization, and each aid as successive steps towards the consummation of the legitimate object required."

His case demanded that of all possible routes the central route be best adapted to the construction of a light, rough line. Lander's predilections would admit of no logical inconsistencies, and he found the central route admirably qualified. The heart of the Lander plan thus involved building a preliminary railroad over a central route with connections to both California and Puget Sound.

Nevertheless, Lander was no bigot on the question of route. He was willing to concede that the northern route was "a very excellent one in many respects," and that the southern route was one of the "two grand routes across the American continent...peculiarly adapted to the ready and rapid extension of a rough preliminary railroad." What Lander gave with one hand, however, he took back with the other, for he mustered evidence to diminish the efficacy of these commendations. His strong belief that various circumstances contributed to the preferability of the central route remained unimpaired.

The superiority of the northern route, wrote Lander in 1854, rested upon the "apparent short distance between eastern navigable waters and Puget Sound." But the "extreme difficulties" of the mountainous terrain through which the route had been projected, in Lander's view, destroyed this advantage. He saw in the Cascade Range a principal stumbling block, for it would be "necessary either to tunnel that mountain range at an almost impracticable

25Clipping in Lander Papers taken from Alta California, n.d. This clipping contains a copy of Lander's address to the Pacific Railroad Convention, delivered September 22, 1859, and is hereafter cited as "California Address."
26Senate Ex. Docs., 33 Cong., 2 sess., XIII, Pt. 2, 16.
27Lander, Remarks on the Construction of a First Class Double Track Railway to the Pacific (Washington, D. C., 1854), pp. 11-12.
pass... or to surrender the line of direction, and to deflect so far towards the south as to pass through the great valley of the Columbia River." Additional objections involved not only winter snows and the ice which closed Lake Superior to shipping during the winter months, but also the proximity of the line to Canada where it would have to compete with a Canadian railroad and where it would be militarily indefensible.

Perhaps because of the moderate but loyal support he gave the Democratic party, Lander was more charitable toward the southern route; at least he was careful to give due consideration to the viewpoints of the South. He admitted in 1854 that the southern route had certain advantages over his own, the most important resulting from an absence of snow and frost. But looking at the other side of the coin, he went on to add that "a northern population would be decimated during the summer by the fevers of the gulf." Furthermore, he held that the central route had unique advantages: pure water could be obtained more readily there than in the southern deserts; being of a central position, it could be more easily defended in time of war; it could be supplied with labor and provisions at less expense; and finally, when built, it would "command and unite important and conflicting public and private interests."

By 1860, Lander developed a more unusual rebuttal to the arguments for a southern line. He supported its construction, but he did so in such a way as to make the central route appear more attractive by contrast:

There are few subjects more important to the nation than the future of the Mexican Republic. The extension of a railroad along or adjacent to the Southern border relieves this question of all difficulty. The settlements which would grow up upon the route, and the means of transporting and concentrating volunteer troops thus supplied would settle it forever... The argument that this is an isolated road, not a central, not the great national highway, fails here. The argument that this

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28 Senate Ex. Docs., 33 Cong., 2 sess., XIII, Pt. 2, 16.
29 Lander, "California Address"; Remarks on the Construction of a First Class Double Track Railway to the Pacific, p. 12.
30 Senate Ex. Docs., 33 Cong., 2 sess., XIII, Pt. 2, 16.
road has been aided by the State of Texas and has not progressed, also fails. If across the undulating country of Texas this road is difficult of construction,—if labor is high, if contractors cannot fulfill their engagements, if fuel is scarce, if timber cannot readily be furnished to the road, if there is no local traffic to sustain it when built, so much the more reason for direct and efficient aid to it by the Government of the United States. If it needs twice the amount to sustain it that the central route does, let it have it.31

Although Lander admitted that both northern and southern routes had advantages and should be constructed eventually, he maintained that they could never attain the commercial importance of a central route. What the Ohio River had been to the eastern portion of the continent, the central Pacific railroad would become to Nebraska, Kansas, Utah, and the Pacific Coast.32 But so numerous were the proposed routes lying between the northern and southern extremes, that the term “central” could be used accurately only in a generic sense. Where, specifically, would his line run? Lander himself was never very clear on this point. He insisted that the selection of a railroad line must await more detailed surveys than had yet been made. He intimated that he could direct such a survey in conjunction with his duties as superintendent of the wagon road, should Congress care to appropriate $10,000 for that purpose.33 But as an exponent of an evolutionary method of railroad construction, he could see little advantage in following a general route other than the one taken by emigrants to Oregon and California. In 1860, Lander drew up a bill for legislative consideration

31Lander to Hon. R. E. Fenton, House of Representatives, Washington, March 23, 1860. This letter was printed in the New York Times, March 28, 1860, and the National Intelligencer, April 3, 1860. The effectiveness of Lander’s argument here is open to question. This letter elicited a reply from Captain A. A. Humphreys of the Topographical Engineers, taking him to task for suggesting that the southern road would be more costly. Humphreys’s letter was reprinted in House Reports of Committees, No. 428, 36 Cong., 1 sess., Appendix A, and was referred to by Representative Andrew Jackson Hamilton of Texas in the minority report opposing the construction of a railroad by the central route.


in which he proposed the immediate construction of only
the first section of an overland railroad. This section was
to follow the Platte River from its mouth to the confluence
of its forks. While this part of the line was under construc­
tion, provisions were to be made for a survey of its exten­
sion through Salt Lake City to California.34 Such a location
would ultimately provide communication not only with Cali­
fornia, but also Oregon, should the branch line surveyed by
Lander in 1854 be built.35

Location, important though it was, was only one aspect
of the Lander plan. Equally significant and even unique were
his ideas on the proper methods of construction and finance.
In these matters his insight was keenest, and, had his views
been in accord with public opinion, the entire development
of western railroads would have been radically altered.
Throughout his career Lander insisted upon the slow, evo­
lutionary development of communication with the Pacific
Coast. From first to last he inveighed against grandiose
schemes then current, pointing out that overexpansion leads
inevitably to financial crisis. But the West greeted the
elaborate projects Lander deplored with an enthusiasm
commensurate to western optimism. It confidently awaited
the millenium resulting from the completion of a vast west­
ern railroad network, for it believed the new era would
bring wealth and fame to every westerner, commercial im­
portance to every city, and prosperity to every state.36  To

34Lander, A Bill to Provide for the Construction of a Railroad
from the Missouri River to the Pacific Ocean (Washington, 1860),
pp. 1-2.
35Senate Ex. Docs., 33 Cong., 2 sess., XIII, Pt. 2. Lander here
describes in detail the terrain from South Pass to Seattle.
36Robert E. Riegel, The Story of Western Railroads (New York,
1926), p. 8. Typical of the elaborate proposals Lander found so
appalling was that of Dr. Hartwell Carver. According to Carver's
plans, heavy rails were to be laid eight or ten feet apart on a solid
and permanent foundation of stone. The cars themselves were to be
“floating palaces” sixteen to twenty feet wide and one hundred feet
long. There would be staterooms and berths for sleeping as well as
“saloons”, dining halls, and kitchens. The wheels were to be twice
the height of a standard wheel, making it theoretically possible to
travel twice as fast with one revolution of the engine wheel. Hartwell
Carver, A Memorial for a Private Charter (Washington, D. C.,
1849), p. 2; Proposal for a Charter to Build a Railroad to the Pacific
his credit, Lander saw in grand trunk railroad projects calling for immediate construction not a panacea but a chimera. His view did not impress the general public until debts cheerfully incurred began lamentably to fall due.

Lander returned from his first transcontinental reconnaissance complaining that the concept of a first class railroad “still lies like an incubus on every effort made by professional parties to divest this national project of...objectionable features.”37 Six years later, in 1860, he was whistling the same tune to a faster tempo:

Let us suppose that one of the gigantic bills, so often laid before Congress is passed; that the central route is endowed with the millions of dollars capital and millions of acres of land enumerated in such bills; what is the result? What are the powers of such a company, its vested rights, its strange authorities, its political influences?...Such a road would almost command the legislation of the Republic. Compare it with the power of a national bank, and the latter would sink into insignificance. No such engine of corruption has ever yet affected the progress or the destiny of this nation. The rights of the poorer citizen entirely disregarded, the spoils parcelled out, the full powers of millions of dollars of capital brought to bear, the great stock markets clogged with the scrip of the company, the business relations of the country laboring under the crises thus created. Jackson would turn in his grave were such a policy inaugurated.38

Lander’s project, which would ensure the immobility of Jackson’s remains, was based in part on the argument that federal aid to the Pacific railroad could be justified on the basis of military necessity. He wrote that the national government could legitimately and constitutionally lend support to construction only insofar as the completed road provided “effectual means of overland mail and military transportation.”39 This justification did not demand astronomical expenditures on a first class road, and while Lander conceded that commercial needs might eventually necessitate great and elaborate improvements, the first and con-

37 Senate Ex. Docs., 33 Cong., 2 sess., XIII, Pt. 2, 8.
38 Lander, A Bill to Provide for the Construction of a Railroad from the Missouri River to the Pacific Ocean, pp. 22-23.
stant principle of his project was that no road should be placed "under serious liability of maximum equipment for service it may never be called upon to perform." 40

Lander first proposed a rough, preliminary road consisting of a T-rail of sixty pounds per yard, spiked to a cottonwood cross-tie, and adjusted to a ditched and drained surface. 41 Later he advised the use of a lighter rail of forty pounds per yard because it was cheaper and easier to bring into alignment when out of surface. 42 The Platte Valley, Lander argued, was ideally suited to the extension of such a line. It offered a flat plain of gravel substrata with no natural obstructions—advantages which made extensive grading unnecessary. 43 Over more difficult terrain in the mountains, Lander urged the construction of a piling road with wooden rails to be worked by mules and horses. With grasshopper engines operating at a speed of eighteen miles per hour and draught animals averaging ten, Lander hoped to keep the line in operation throughout the year. 44 Scoffers were advised that not only was a wooden track durable enough to be used for ten or fifteen years, 45 but that this rough railway could provide communication as adequate as any grand trunk road until connection with the Pacific terminus was established. Lander could see little advantage in setting out to construct a first class road only to have it wear out, decay, and become obsolete while it was being completed. 46 The primary object was to establish immediate railroad communication with the Pacific Coast; the improvement of that communication was secondary.

One of the advantages of a rough preliminary railroad was its limited cost, a factor which Lander seldom failed to point out. But in the struggle for ascendency over the minds

40 Senate Ex. Docs., 33 Cong., 2 sess., XIII, Pt. 2, 12.
41 Ibid., p. 15.
42 House Ex. Docs., No. 70, 35 Cong., 1 sess., IX, 5.
43 Ibid., p. 9; Senate Ex. Docs., 33 Cong., 2 sess., XIII, Pt. 2, 15.
44 House Ex. Docs., No. 70, 35 Cong., 1 sess., IX, 6.
45 Lander, "California Address." 46 Lander, Remarks on the Construction of a First Class Double Track Railway to the Pacific, pp. 4-5. Lander overestimated the length of time required to build a first class road. He thought construction would take twenty years.
of the legislators, the virtues of economy were not lost on other projectors. They accordingly belabored the idea that mail and troops be given free transportation and that construction of the road be paid for by means of land grants based on the alternate sections principle. Lander's opposition to these proposals served to emphasize the provident nature of his project. Such munificent land grants as had been proposed would, he believed, not only further the development of a great landed monopoly and work to the disadvantage of the settler, but also tend to precipitate those financial crises "to which the pecuniary affairs of this enterprising people have always been so peculiarly liable." Lander warned against "pushing the squatter to extremity," for the very nature of his frontier environment made the pioneer farmer "ever ready to argue whether the patronage of capital, without corresponding advantages secured to labor, is not at conflict with a true interpretation of the strictly defined powers of government emanating from the people." His concern for the settler also found expression in a suggestion that contracts be let for military and mail transportation in order that fares for emigrants might be lowered correspondingly.

Although Lander in 1854 took a dim view of the financial propositions of rival projectors, it was not until 1858 that he elaborated tentative plans for financing the road. In a report submitted to Congress that year he wrote that the national government could well afford to pay $5,000 per mile for a "river of iron" to the West. In addition to this,

48 House Ex. Docs., No. 70, 35 Cong., 1 sess., IX, 13.
49 Ibid., p. 12.
50 Most prominent among those who favored a land grant was Asa Whitney. In 1856, Lander wrote to Representative James McDougal of California: "I have recently had several interviews with Whitney...Mr. Whitney does not materially differ from me in his views on the question. We both believe this great undertaking must be the result of the definite action of the State of California calling upon the general government for the solution of the necessity of overland communication on the simple and direct constitutional grounds under which that State became a member of the confederacy." Lander Papers, Lander to McDougal, Washington, October 2, 1856.
at each watering station the builders of the road were to be rewarded with sections of land as town sites. Lander was convinced that these “sources of emolument,” augmented by an influx of settlers to increase way traffic, would amply pay for “renewal of cross ties from the firmer timber of the mountains, and the raising of the track two feet above the flat surface of the valley to a drained, ditched, and dressed road-bed, with culvert masonry and more permanent bridges than would be used at the outset.”

These plans, though explicit, were nothing if not elastic. In January, 1859, the *National Intelligencer* reported that Lander had offered to build a road from the mouth of the Platte to Salt Lake City for $5,000 per mile “provided he be allowed to import his rails without duty, and be assigned one section of land for each ten miles of the route.” Or, alternatively, he would pay the duties on rails and undertake the same project for $10,000 per mile. Lander, having made these or similar proposals in “casual conversation,” hastened to modify his reported plan. Capitalists, he wrote, were willing to attempt the extension of a rough, preliminary railroad “whenever Government will give the right of way, access to fuel and building materials, a section of land at stopping places, and the sum of $5,000 per mile to pay for iron admitted duty free.” He was honest enough to admit that “Government” would receive in return for its expenditure only an opportunity to sell public lands and a means of rapid military and mail transportation to the coast. Lander evidently believed that circumstances sometimes called for a change in his proposals. At the Pacific Railroad Convention held in San Francisco in September, 1859, he said, “That if Government will give us from 10 to $20,000 per mile, we will build by the waters of the Platte, to the Snake and Goose creek country, to the Humboldt and along the eastern base of the Sierra Nevadas, to the eastern border of California.”

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51 *House Ex. Docs.*, No. 70, 35 Cong., 1 sess., IX, 14.
52 *National Intelligencer*, January 17, 1859.
53 Clipping in the Lander Papers from the *National Intelligencer*, March 22, 1859.
54 Lander, “California Address.”
Lander's apparent irresolution with respect to certain details of his project may have stemmed from a willingness to compromise within limits that would assure evolutionary development of overland rail communication. In 1860, however, when he submitted his railroad bill to Congress, he presented what may be taken as his final and definitive plans. They provided for construction of his road in sections of one hundred miles from the Missouri River to the forks of the Platte. When the workability of the first section was demonstrated by the passage of trains travelling at a speed of twenty miles per hour, Lander was to be paid $6,000 per mile for the work completed. He could then proceed to the extension of the line for another one hundred miles. The same test was to be applied to each succeeding section until the road was completed. Additional privileges to be granted the builder were access to fuel and building materials, the right of location and title to one section of land for each ten miles of railroad, and pre-emption rights to four quarter sections per mile within two miles of the road. The bill provided for the appointment of two special governmental commissioners, one to represent and protect the rights of settlers, the other to assist in the location of the road. Two army officers were to direct surveys for the extension of the line to Salt Lake and beyond. Iron used in construction was to be of American manufacture, and provisions were made for carrying troops and mails by contract. The most important feature of the bill, according to Lander, was the provision that the road revert to the government at cost any time it chose to take possession.55

Lander did not suggest that the government bear the whole cost of the Pacific railroad. On the contrary, he estimated that even a preliminary road could not be constructed across the plains of Nebraska for less than $30,000 per mile. The government aid requested would serve only to guarantee payment of 6% interest on the cost of construction for five years. During this period he believed that the route would become sufficiently populated to pay for itself.

55Lander, A Bill to Provide for the Construction of a Railroad from the Missouri River to the Pacific Ocean, pp. 1-8.
Nevertheless the contractor and not the government would bear the greater share of the risk.\textsuperscript{56} Lander, however, was not one to take chances, nor was he one to hide the fact that there were profits to be made in railroad building:

If private individuals perceive emoluments to be gained in building and working this road, as shown in the present bill, they can use plain speech and say so. Now why do they perceive the advantages? They are plain in the concentration of the entire traffic of this great forked line of the Central route. Mormon supplies, gold mines of Kansas, overland travel, freight, and mails to Oregon, Washington and California, brought down to one outlet and inlet, and drawn to or debouching from this road. Yet, with all this they do not feel justified in taking the whole risk of building, unless the first five years interest is guaranteed. They will then not have to take a dollar of its earnings away from the legitimate service of the maintenance and repair of the road.\textsuperscript{57}

Apparently Lander was convinced that the prerequisite to securing an overland railroad was general and, if possible, enthusiastic approval of a compromise road. His plans, like the central route itself, were formulated to "command and unite important and conflicting public and private interests." They contained provisions calculated to pacify those individuals and groups responsible for blocking Pacific railroad legislation: for the strict constructionist there was military justification for a road; for the western advocate of free land there was the assurance that his rights would be defended; for the parsimonious there was the promise of low cost communication; for the southerner there were honeyed words in praise of a southern line; for the iron manufacturer there was the belated proposal that only American iron would be used in construction; for the investor there were proofs of financial soundness; for the settlers in Oregon and various communities in the Mississippi Valley there were recommendations for branch lines.

While Lander was developing these plans for an evolutionary railroad, he was perforce active in propagating his fundamental theses in competition with other projectors

\textsuperscript{56}Ibid., p. 9.
\textsuperscript{57}Ibid., p. 14.
of an overland line. His oratorical abilities, evident integrity, and engineering experience brought him welcome public recognition if not the more coveted general approbation of his project. Lander seldom turned down an opportunity to plead his case either in print or on the podium, and his perseverance bore fruit. The New York Times on January 26, 1859, described him as “one of the ablest practical engineers in the country,” and suggested that Congress be pressed to vote on his proposals.58 The following month, when the citizens of Omaha drew up a memorial favoring the central route, they cited Lander as a primary authority on its feasibility.59 At St. Joseph, Missouri, a dinner was given in his honor at “Beno’s elegant establishment” where his remarks on the Pacific railroad “were listened to with interest, and elicited unanimous applause.”60 The Boston Daily Courier in 1860 looked to the Lander project as a ray of light in a nation darkened by sectional conflict. “The plan recommends itself,” commented the Courier, “by its extreme simplicity, its freedom from objections of a constitutional or any other nature, its adaptedness to rapid and economical construction, and the certainty that no political considerations of any extraneous character can embarrass its execution.”61

The Pacific Railroad Convention was made to order for Lander’s peculiar talents, and he was conspicuously in attendance. On the evening of September 22, 1859, he delivered what the Alta California called “emphatically the rail-road speech of the age.” The Convention was similarly impressed, and passed a resolution tendering its thanks “to Colonel F. W. Lander, for his able and instructive address.”62 Always ready to press an advantage with an audience, the Colonel found an opportunity to do so here when he referred to the Hon. James A. McDougal, “to whom the State of California

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58Clipping in the Lander Papers.
59Clipping in the Lander Papers dated February 2, 1859. The name of the newspaper is not given.
60Clipping in the Lander Papers from the St. Joseph West, n.d. The dinner was given May 4, 1859.
61Clipping in the Lander Papers from the Boston Daily Courier, March 29, 1860.
62Quoted in Lander, A Bill to Provide for the Construction of a Railroad from the Missouri River to the Pacific Ocean, p. 18.
is greatly indebted, for his course in regard to a Pacific railroad.” After receiving great applause, Lander went on to add:

I thank you, gentlemen, for that applause. I am glad to see that the mention of that gentleman’s name in California meets with such a response. (Applause.) I thank heaven that Gen. James McDougal of California was in Washington in 1854, when I reached there with the results of those surveys, for if any other gentleman had been there, from California, whom I know anything about, those results would never have so reached the United States at large. (Applause.) My gratitude to him will never die. If ever during the future of my life, I can aid that gentleman in anything which will combine itself with the progress of this nation, I would follow him to the death, for what he did for me. (Applause.)

Lander was greeted with equal enthusiasm when he demanded “from the American Government, consideration and respect, our rights and our privileges,” and when he asked, “how can the Congress of the United States hesitate in regard to what is necessary to protect us?” But this, his greatest oratorical feat, did not consist entirely of demagoguery. Lander went on to discuss his project, emphasizing in particular the advantages of the central route. The Convention, as it turned out, officially adopted the central route over determined opposition, and Lander’s views emerged triumphant.

That triumph was not only local; it was also short-lived, for Lander’s activities as a railroad projector came to an abrupt halt with the outbreak of armed conflict in 1861. After volunteering to serve the Union cause, he was sent on a secret mission to Sam Houston in Texas. Upon his return, he served with McClellan at Philippi and Rich Mountain and was thereafter appointed brigadier general of volunteers. Although he received a severe wound in the leg, the opening months of 1862 saw him fighting brilliantly at Hancock and Blooming Gap. The campaign was a difficult one. Lander’s health began to fail, and on March 2, 1862, while preparing to move his division into the Shenandoah

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63 Lander, “California Address.”
64 Ibid.
Valley, his powerful but overworked physique gave way suddenly to a "congestive chill."66

Typical of public reaction to the untimely conclusion of a promising career was a statement issued by McClellan: "History will preserve the record of his life and character, and romance will delight in portraying a figure so striking, a nature so noble, and a career so gallant."67 If history preserved the record, reconstruction politicians failed to read it carefully. True, the Union Pacific followed a central route along the Platte River, but Lander's plans for an evolutionary railroad were ignored. Though he may not have spoken with the tongues of angels, his prophetic powers became more apparent as crisis followed crisis, as the fall of the house of Cooke and the Credit Mobilier scandals were followed by agrarian discontent and the revolt of the farmer.

67 Frank Moore, Heroes and Martyrs: Notable Men of the Time (New York, 1861), 177.