

The Plank Road Enthusiasm in the Antebellum Middle West

Carl Abbott*

The common roads of the United States are inferior to those of any other civilized country. Their faults are those of direction, of slopes, of shape, of surface, and generally of deficiency in all the attributes of good roads.

William M. Gillespie

Our people have not been in the habit of looking to the English colonies, at this day, for models of enterprize . . . but it is as true as it is mortifying, that our provincial neighbors across the Lakes are vastly in advance of us with regard to this, the great road improvement of the age.

Philo White¹

The possibility of surfacing common country roads with sawed lumber, an innovation which for a brief time promised to revolutionize rural transportation, received public notice in the United States as early as 1843. In that year, a series of articles describing the construction of plank roads in Canada was published in the Rochester *Democrat* and widely copied in other New York papers. At the same time a short, unsigned communication "On Plank Roads in Canada" was appended to the annual report of the United States commissioner of patents. This anonymous letter concluded, after sketching Canadian experience with such thoroughfares, that they were at the least potentially valuable improvements for regions where stone was scarce and timber abundant.²

Interest in country and interurban plank roads increased in upper New York during the following year. One group of promoters not only organized to build a plank road from Syracuse to the town of Central Square but also sent one of its number to Canada to investigate the feasibility of importing this northern innovation to the United States. Other New Yorkers organized similar companies, and

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¹ William M. Gillespie, *A Manual of the Principles and Practice of Road-Making: Comprising the Location, Construction, and Improvement of Roads . . . and Railroads* (10th ed., New York, 1871; first published, 1847), Preface; "Report of Mr. [Philo] White, on the Subject of Plank Roads," Wisconsin Territory, *Council Journal* (1848).

² J. Snow, "Plank Roads—New Improvement," *Hunt's Merchants' Magazine*, XVI (April, 1847), 369; *Report of the Commissioner of Patents for 1843*, U.S., Senate Document 150, 28 Cong., 1 Sess., Appendix 32, p. 229. Plank roads differed sharply from the well known corduroy roads. Whereas the former consisted of a smooth surface of sawed lumber laid on a carefully prepared foundation, the latter, which had been in common use throughout the continent for some decades, were made by laying whole logs across a roadbed at right angles to its course. Such cheap and easily constructed roads were often laid in swampy sections of newly opened frontier areas. However, because they were intolerably rough and quick to decay, they were usually replaced by less crude thoroughfares as a region developed. Edwin C. Guillet, *The Story of Canadian Roads* (Toronto, 1967), 59-63.

in April, 1844, the state assembly's Committee on Roads and Bridges presented a special report on "various petitions for the incorporation of sundry plank road companies." It noted that "all the applications for plank or timber road charters proceed from the northwestern portion of our State . . . and have doubtless been prompted and stimulated by similar improvements in the neighboring provinces of Upper and Lower Canada." After reporting that investigations in the British provinces had shown the utility of the innovation, the committee predicted that such roads would complete "an entire and beneficial revolution" in the upper parts of the state.³

The system of road building to which New Yorkers were beginning to devote their attention had been in use in Upper Canada for nearly a decade. Apparently, the first road in North America to receive a plank surface had been finished near Toronto in 1836. Although the Rebellion of 1837 had retarded the spread of the improvement, the provincial Board of Works had undertaken a program of construction in 1839. By 1861 the governments of Upper and Lower Canada had laid 162 miles of planking and private companies 214 more.⁴ To a degree the popularity of the roads was based on their low cost and the availability of materials. Even more they commended themselves to the public by their smoothness. A number of delighted travelers thought them "as smooth as a billiard table" and compared riding on them to gliding across a carpet or the floor of a ballroom.⁵

As knowledge of Canadian success with this improvement spread, a plank road craze developed in northwestern New York. According to official sources the state's first such highway was put into operation near Syracuse in July, 1846. Within a year the increase of applications for charters and the demand for a simple method of incorporation caused the legislature to enact a general law for the organization of plank road companies. Fifty-two companies were organized under this act in 1848, eighty in 1849, and about two hundred more in the 1850s.⁶ The enthusiasm also spread to Pennsyl-

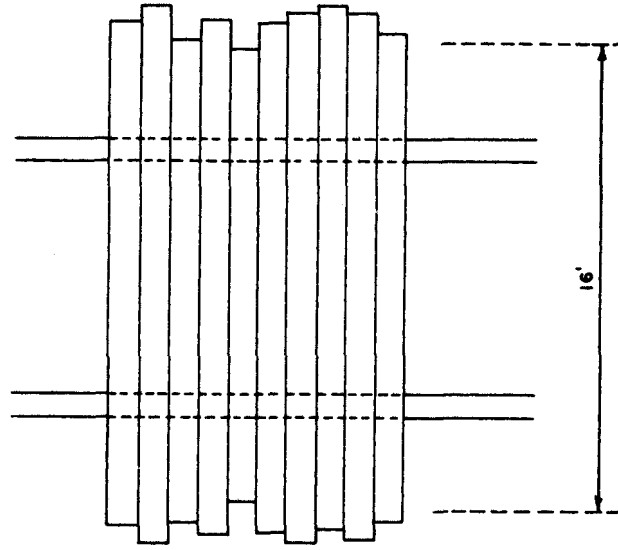
³ William H. Bogart, "The First Plank Road Movement," *Hunt's Merchants' Magazine*, XXIV (January, 1851), 63-65; "Report of the Committee on Roads and Bridges," New York, *Assembly Document* 197 (1844); Joseph A. Durrenberger, *Turnpikes: A Study of the Toll Road Movement in the Middle Atlantic States and Maryland* (Cos Cob, Conn., 1968), 144.

⁴ George P. deT. Glazebrook, *A History of Transportation in Canada* (Toronto, 1938), 120; *Eighty Years Progress in British North America* (Toronto, 1864), 127.

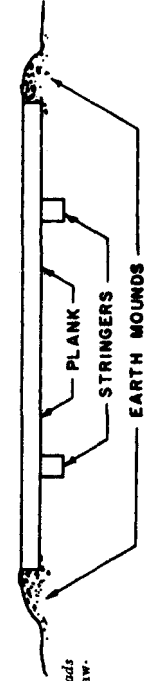
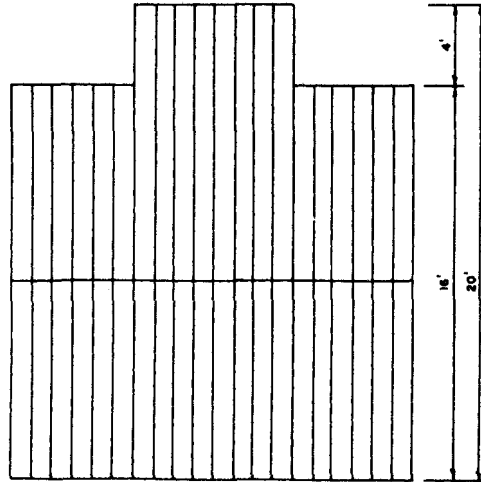
⁵ Guillet, *The Story of Canadian Roads*, 66-69; Edwin C. Guillet, *Pioneer Travel in Upper Canada* (Toronto, 1963), 166; Glazebrook, *A History of Transportation in Canada*, 120.

⁶ "Report of the Committee on Roads and Bridges, in Relation to a General Law for Plank Roads," New York, *Senate Document* 50 (1847), 3; "Report of the Secretary of State in Relation to Plank Roads," New York, *Senate Document* 74 (1850), 3-10; Durrenberger, *Turnpikes*, 145.

PLAN AND SECTION PLAN OF
PLANK ROAD WITH STRINGERS



PLAN OF FULL PLANK ROAD WITH TURNOFF



Reproduced from Edwin C. Guillet, *The Story of Canadian Roads* (Toronto: University of Toronto Press, 1966), p. 68. The drawing was prepared by A. D. Margison and Associates Limited.

vania, which passed a general plank road act in 1849, and to New Jersey, where the innovation was especially popular in the state's isolated southern section. Throughout the Middle Atlantic states some seven hundred companies were chartered and about seven thousand miles of plank highways completed by 1857.⁷

This new development in transportation did not go unnoticed by nationally circulated publications. In 1847 *Hunt's Merchants' Magazine* responded with a descriptive article entitled "Plank Roads—New Improvement." *Niles' Weekly Register* commented two years later that plank roads were "growing into universal favor."⁸ By the early 1850s, when plank highways had become an integral part of the economy of upstate New York, national journals began to celebrate their virtues. The *New York Tribune* praised their ease of construction and stated that the roads added immensely to the transportation facilities of the state, while the *Scientific American* wrote that these roads would be the means for "completely reforming the interior or rural transit trade of our country." *Hunt's Magazine* commented editorially that "every section of the country should be lined with these roads," and published an article which claimed that "the plank road is of the class of canals and railways. They are the three great inscriptions graven on the earth by the hand of modern science. . . . In the list of improvements which have given to this age the character which it will bear in history above all others—the age of happiness to the people—the plank road will bear a prominent place"⁹

For people seriously interested in building a plank road, such general testimonials to their advantages were hardly satisfactory sources of practical information. To satisfy the need for detailed technical knowledge, New York experts published several elaborate plank road manuals during the early years of the enthusiasm. In 1847 a report of the state Senate's Committee on Roads and Bridges included a detailed discussion of the construction and operation of plank roads. Three years later George Geddes, the engineer of the first New York road, published his *Observations on Plank Roads*, and in 1851 another New York engineer, William Kingsford, brought out his *History, Structure and Statistics of Plank Roads in the United States and Canada*. Another widely quoted source was *A Manual of*

⁷ Wheaton J. Lane, *From Indian Trail to Iron Horse: Travel and Transportation in New Jersey, 1620-1860* (Princeton, 1939), 162-64; Durrenberger, *Turnpikes*, 144-45. As indicated in Durrenberger, New York chartered 352 companies to 1857, Pennsylvania chartered 315, New Jersey chartered 25, and Maryland chartered 13.

⁸ Snow, "Plank Roads—New Improvement," 263-69; *Niles' Weekly Register*, LXXV (April 4, 1849), 221.

⁹ *New York Tribune*, quoted in Springfield (Ill.) *Register*, February 12, 1850; *Scientific American*, V (March 23, 1850), 209; "Progress of Plank Roads in New York and Canada," *Hunt's Merchants' Magazine*, XXVII (October, 1852), 509; Bogart, "The First Plank Road Movement," 63.

the Principles and Practice of Road-Making by William M. Gillespie, a professor of engineering at Union College.¹⁰

These authorities agreed on most issues arising from the "recent innovation of covering roads with planks." Although sometimes acknowledging that such roads were a "new and untried experiment" whose novelty might be responsible for some of the interest shown in them, they quickly passed on to unqualified endorsements of the advantages of the improvement.¹¹ According to these men the function of the new roads could be summed up in a single sentence: "Plank roads are the *Farmer's Railroads*." Although railroads were considered superior to plank roads for long distances and for the transport of extremely heavy or bulky goods, plank roads were preferable for "the home use—for the transit which is begun and ended in a day . . . which increases the happiness and profit of the farm." There was further consensus that such highways were valuable not only for the farmer who wanted to haul his produce to market but also for "many thriving villages . . . whose business would not warrant the construction of a railroad" but which nevertheless needed "convenient avenues to and from their locations." Plank roads, in short, were "the feeders of railroads and canals," of more use to the country's farming than to its commercial population.¹²

In describing the essentials of plank road construction, these writers followed closely the methods worked out in Canada.¹³ Few New York engineers would have argued with the following summary of building techniques: "In the most generally approved system, two parallel rows of small sticks of timber (called indifferently *sleepers*, *stringers*, or *sills*) are imbedded in the road, three or four feet apart. Planks, eight feet long and three or four inches thick, are laid upon these sticks, across them, at right angles to their direction. A side track of earth, to turn out upon, is carefully graded. Deep ditches are dug on each side, to ensure perfect drainage; and thus is formed a Plank Road."¹⁴ In addition, the surface of the road was frequently covered with fine gravel or sand to protect it from horseshoes and steel rimmed wheels, and the edges of the planks were staggered so

¹⁰ "Report of the Committee on Roads and Bridges, in Relation to a General Law for Plank Roads"; George Geddes, *Observations on Plank Roads* (Syracuse, 1850); William Kingsford, *History, Structure and Statistics of Plank Roads in the United States and Canada* (Philadelphia, 1851); Gillespie, *Manual*, 230-53.

¹¹ Gillespie, *Manual*, 230; "Report of the Committee on Roads and Bridges, in Relation to a General Law for Plank Roads," 2; see also Kingsford, *History*, 28.

¹² Gillespie, *Manual*, 249; Bogart, "The First Plank Road Movement," 64; "Report of the Committee on Roads and Bridges, in Relation to a General Law for Plank Roads," 7-8; Kingsford, *History*, 20; see also *Scientific American*, VII (January 17, 1852), 141.

¹³ "Report of the Committee on Roads and Bridges, in Relation to a General Law for Plank Roads," 4-6. For Canadian techniques see Guillet, *The Story of Canadian Roads*, 66-69.

¹⁴ Gillespie, *Manual*, 231.

that wagons could more easily turn onto the road. If the planks were not spiked down, dirt was heaped over their ends to help hold them in place. For all except the most heavily traveled roads it was thought sufficient to lay a single track of eight foot planks paralleled by a track of dirt on which vehicles could turn out to pass. Instructions for building plank roads also stressed that the planks should lie directly on the surface of the ground since any air allowed underneath caused dry rot. Moreover, experts warned that mud would squeeze between the planks of a poorly drained road, fouling the surface and creating cavities beneath. There was, however, serious disagreement on how best to overcome these technical problems. Some engineers believed that very light stringers would settle into the earth, keeping the planks on the soil. Others argued, against strong opposition, that stringers formed a kind of trough which held water under the road and should therefore be dispensed with altogether.¹⁵

Agitation for plank roads in the middlewestern states followed closely on the initial interest in New York. In the latter part of 1844 and the first months of 1845 Indianapolis and Fort Wayne editors commented on the innovation, and newspapers in Cleveland and Chicago reported series of meetings, called for the promotion and organization of plank road companies.¹⁶ From Cleveland a committee of interested citizens dispatched an emissary to investigate the construction of plank roads in Canada and published a report in the *Cleveland Herald* in April, 1845. In Illinois advocates of a Chicago-Rockford road, among whom were such leading Chicagoans as J. Young Scammon and Walter Newberry, obtained a charter early in 1845 and also sent an engineer to Canada to bring back first hand information.¹⁷ In none of the cities, however, did this activity produce results. In 1846 plank roads were still considered an "experiment," and a Chicago magazine remarked that the possibility of constructing such

¹⁵ Gillespie, *Manual*, 234-44; Kingsford, *History*, 21-22; Geddes, quoted in *Scientific American*, V (April 27, 1850), 254; Charles E. Clarke, "A Letter on Plank Roads," in Kingsford, *History*, 36-39. It was recommended that the plank track be laid on the right side coming into town, so that farm vehicles carrying heavy loads to market would have the right of way.

¹⁶ *Chicago Democrat*, September 11, December 4, 1844; *Chicago Gem of the Prairie*, December 1, 1844; *Indianapolis Indiana Journal*, May 14, 1845; Charles R. Poinsatte, *Fort Wayne during the Canal Era, 1828-1855: A Study of a Western Community in the Middle Period of American History* (*Indiana Historical Collections*, Vol. XLVI; Indianapolis, 1969), 241; *Cleveland Herald*, August 24, December 4, 1844, January 3, 14, February 3, 17, 1845, quoted in *Annals of Cleveland: A Digest and Index of the Newspaper Record of Events and Opinions* (Cleveland, 1938). *Annals of Cleveland* is a paperbound, mimeographed series of volumes containing excerpts from Cleveland newspapers. There is a volume for each year beginning in the 1840s and continuing into the twentieth century. It was a Works Progress Administration project.

¹⁷ *Cleveland Herald*, April 3, 1845, quoted in *Annals of Cleveland; Prairie Farmer*, IV (October, 1844), 246; Charles A. Church, *History of Rockford and Winnebago County, Illinois* (Rockford, 1900), 192; *Chicago Democrat*, December 4, 1844.

thoroughfares had by that date "passed out of the public mind."¹⁸

After this apparent hiatus interest in plank roads began to revive in the Middle West in 1847. Articles appeared in newspapers from Indiana to Iowa, the widely read *Prairie Farmer* carried an editorial advocating the planking of roads, and the region's first such highway was finished in 1847 between Milwaukee and Watertown.¹⁹ By the following year the issue was being discussed and companies organized in every state of the Old Northwest. The interest in rural plank roads was perhaps increased by a simultaneous application of the new surfacing technique to the formidable problem of paving the streets of western cities.²⁰ So rapidly did interest burgeon that four middle-western states—Michigan, Wisconsin, Indiana, and Illinois—set up standardized procedures for the incorporation of plank road companies by the spring of 1849.²¹

To satisfy the need of middlewesterners for reliable information on both the economic advantages and the methods of construction of plank roads, western magazines carried numerous articles on such highways. Chicago's *Prairie Farmer* reprinted a short article by George Geddes, quoted from a pamphlet issued by a committee of Racine citizens entitled "Plank Roads: A Report on their Utility and Economy," and excerpted Gillespie's *Manual*.²² The *Western Journal and Civilian*, published at St. Louis, also reproduced Gillespie's chap-

¹⁸ Chicago *Journal*, April 21, 1845, January 19, 1846; *Prairie Farmer*, VII (April, 1847), 123.

¹⁹ Bayrd Still, *Milwaukee: The History of a City* (Madison, 1948), 51; Richard C. Overton, *Burlington West: A Colonization History of the Burlington Railroad* (Cambridge, Mass., 1941), 48; *Prairie Farmer*, VII (April, 1847), 123; Indianapolis *Indiana Journal*, February 12, July 12, 1847.

²⁰ At the same time that they advocated plank roads in the country and between towns, Chicago newspapers also urged the planking of the city's downtown streets. Following a few small scale experiments, the city undertook a major program of street planking in 1849, laying twenty-seven miles of such pavement by 1854. Bessie L. Pierce, *A History of Chicago* (3 vols., New York, 1937-1957), II, 318; Elias Colbert, *Historical and Statistical Sketch of the Garden City* (Chicago, 1868), 42-43. Cleveland also began to plank its streets in 1849 to the delight of at least one of its newspapers. Cleveland *Daily True Democrat*, October 7, November 16, December 1, 1848, May 5, July 19, 1849, quoted in *Annals of Cleveland*. On the basis of the Chicago and Cleveland experience Milwaukee began to put the same surface on its streets in 1852 and other cities noted the innovation with interest. Still, *Milwaukee*, 237-38; Galena (Ill.) *Jeffersonian*, October 4, 1851. Since streets in these young cities were as much storm sewers and sanitary sewers as they were thoroughfares, the experiment had little hope of success. Pools of foul and stagnant water accumulated beneath the plank surfaces, rotting the wood and producing fountains of filth every time a wagon or pedestrian ventured onto the loose planks. Colbert, *Historical and Statistical Sketch*, 42-43; Mayor Levi Boone, *Inaugural Address* (Chicago, 1856), 5-6. By 1857 Cleveland was rapidly tearing up its remaining planks, while the Chicago City Council decided in the same year that paving with gravel was cheaper than planking. Cleveland *Leader*, April 28, 1857, quoted in *Annals of Cleveland*; Alfred T. Andreas, *History of Chicago. From the Earliest Period to the Present Time* (3 vols., Chicago, 1885), I, 194.

²¹ Remley J. Glass, "Early Transportation and the Plank Road," *Annals of Iowa*, XXI (January, 1939), 517-18.

²² *Prairie Farmer*, VII (April, 1847), 123; VIII (March, 1848), 74-75; IX (July, November, 1849), 228-29, 347.

ter on plank roads, quoted from a New York paper "for the purpose of showing the favorable opinion entertained of plank roads in that part of the country," and summarized a report to the Wisconsin territorial Council. In addition the *Western Journal and Civilian* published an original discussion of plank roads by Joseph E. Ware of St. Louis and agitated in its editorial columns for their construction.²³

Middlewestern newspapers which printed letters and reports by local experts and extracts from eastern publications were an additional source of technical information for plank road builders.²⁴ Customarily, however, newspapers played a more direct role in the generation of the plank road mania. A typical western editor considered the boosting of his locality his chief journalistic task and had little hesitation about making himself the champion of a new transportation improvement. John Wentworth's *Chicago Democrat*, for example, carried article after article about plank roads, and Indianapolis editors assured their readers that plank roads were a pleasant and practical means of travel rather than an experiment.²⁵ In Cleveland the *Daily True Democrat* repeatedly asked its readers why the city had no such roads, delivered lectures on their value, and in 1851 trumpeted: "Push on these highways of the people." In Missouri the editor of the *Columbia Weekly Statesman* similarly made the advocacy of local plank roads the paramount issue for his paper in 1851.²⁶

This local emphasis in middlewestern newspapers fitted with the normal business organization of plank road companies, most of which were promoted, financed, and controlled by the inhabitants of the regions which they served. In the usual case a small group of promoters planted publicity in local papers, secured a charter, and peddled stock by holding a series of public meetings in the counties traversed by the road.²⁷ In some instances promoters also secured public aid for their

²³ *Western Journal and Civilian*, I (July, 1848), 381-82; II (January, 1849), 5-6; IV (May, 1850), 91-98; V (March, 1851), 335-41; Joseph E. Ware, "Construction of Plank Roads," *Western Journal and Civilian*, VI (June, 1851), 171-77.

²⁴ *Milwaukee Sentinel and Gazette*, February 19, 1848, quoted in Balthasar H. Meyer, *A History of Early Railroad Legislation in Wisconsin* (*The State Historical Society of Wisconsin Collections*, Vol. XIV; Madison, 1898), 221; *Burlington Telegraph*, February 20, 1851, and *Muscatine Journal*, December 7, 1850, in John E. Brindley, *History of Road Legislation in Iowa* (Iowa City, 1912), 70; *Gem of the Prairie*, March 8, 1851; *Chicago Democrat*, January 22, 1848, July 15, 1849.

²⁵ *Indianapolis Sentinel*, February 10, 1849; *Indianapolis Locomotive*, December 23, 1848, October 22, 1849; *Chicago Democrat*, October 2, 9, December 9, 1848, January 16, February 1, 1849.

²⁶ *Cleveland Daily True Democrat*, November 3, December 4, 12, 1848, April 24, 1849, March 21, 1851, quoted in *Annals of Cleveland*; Paul C. Doherty, "The Columbia-Providence Plank Road," *Missouri Historical Review*, LVII (October, 1962), 53-55.

²⁷ For example see George A. Boeck, "A Decade of Transportation Fever in Burlington, Iowa, 1845-1855," *Iowa Journal of History*, LVI (April, 1958), 133-39; Ben H. Wilson, "The Burlington Road," *The Palimpsest*, XVI (October, 1935), 309-

project.²⁸ After sufficient stock had been subscribed and payments had begun to trickle in, the company was ready to order lumber and to put the first few miles under contract, usually building outward from the most important town served. Since cash was scarce in most parts of the Middle West, stock usually sold slowly and in small amounts and was often paid for with deeds to real estate or promises of labor. As a consequence two or three years sometimes were required to build a road fifteen or twenty miles long.²⁹

Once their highway was in operation, the builders of a plank road reaped their profits from the tolls they charged on the passage of horsemen, vehicles, and animals. Maximum rates were set for the earlier roads in their individual charters and for the later by the general state laws under which they were incorporated. Although the rates varied from state to state, they were somewhat higher in the Middle West than in New York.³⁰ Because construction costs were low and roads were short, the total investment in each company was usually measured in the tens of thousands of dollars. A good return on capital might therefore be expected with a small amount of traffic.³¹

The enthusiasm for plank roads was perhaps stronger in Ohio than in any other state during the late forties. Nine companies were chartered during the initial attention in 1845, eight with the revival of interest in 1848, and thirty-seven in 1849. Eighty-nine companies were incorporated in 1850, but only sixty-two the following year. The innovation was most popular in the northern half of the state, especially in the counties within forty miles of Lake Erie. A number of roads were also incorporated in the state's hilly eastern section. Almost none, however, were built in the Miami and lower Scioto valleys.³² Instead, the heavily developed southwestern corner of Ohio

11; Ben H. Wilson, "Planked from Keokok," *ibid.*, XXVII (December, 1946), 370-75; Overton, *Burlington West*, 48-49.

²⁸ Randolph C. Downes, *Canal Days* (Lucas County Historical Series, Vol. II; Toledo, 1949), 93; Boeck, "A Decade of Transportation Fever," 135.

²⁹ For the prevalence of small shares, the scarcity of cash, and the slowness of construction, see *Second Annual Report of the President of the Central Plank Road Company* (Indianapolis, 1851); *Minute Book of the Southern Plank Road Company* (Michigan City), John B. Niles Papers (Lilly Library, Indiana University, Bloomington); Samuel Hanna to Allen Hamilton, November 11, December 31, 1850, Allen Hamilton Papers (Indiana State Library, Indianapolis).

³⁰ Robert Dale Owen, *A Brief Practical Treatise on the Construction and Management of Plank Roads* (New Albany, 1850), 69-71; *Indianapolis Journal*, October 3, 1849. In 1853 the New York legislature made rates roughly equal to those in Indiana and Illinois. Durrenberger, *Turnpikes*, 144.

³¹ Owen, *Treatise*, 86-87. Few New York roads had a capital of more than \$50,000, while the Central Plank Road, one of the largest roads in Indiana, had a subscribed capital of \$83,250 in 1850. *Second Annual Report . . . Central Plank Road Company*, 6.

³² Ohio, "Report of the Secretary of State for 1885," 211-16; *Cincinnati Mercury*, April 30, 1849; Ohio, "Report of the Auditor of State for 1852"; William F. Gehart, *Transportation and Industrial Development in the Middle West* (New York, 1909), 146, 222.

relied on numerous macadamized turnpikes built during the previous fifteen years.³³

The onset of the excitement in Michigan was contemporaneous with activity in Ohio. Several dozen charters were granted in 1848, and the press of work forced the legislature to pass the West's first general plank road act in March of that year. During the next several years such roads proved "highly profitable" to their builders and "very popular" with the public. Moreover, they played an important part in the state's economy, not only linking its smaller towns but also connecting such cities as Lansing and Grand Rapids to the slowly developing rail network.³⁴

In Indiana the interest in plank roads was more widespread than in Ohio but somewhat later to develop. The state's first plank roads were finished in 1849 near Indianapolis and Fort Wayne.³⁵ Governor Joseph A. Wright commented to the General Assembly in that year that "no public improvement seems to commend itself to the public with more favor," while the Indianapolis *Journal* noted that plank roads were attracting attention all over the state.³⁶ In 1850 both the Madison *Courier* and the *Indiana Statesman* noted the prevalence of a "plankroad spirit."³⁷ At the same time Robert Dale Owen, who had been sent by an Indiana company "to visit that portion of western New York where plank roads were first introduced into this country," published his observations in a book widely disseminated and highly acclaimed by Indiana editors. Within a hundred or so pages he excitedly endorsed the improvement, discussed the methods of construction and economic advantages of plank roads, and recommended the writings of Geddes and Gillespie.³⁸ By the following year 400 miles of such highways were in use and hundreds more near completion.³⁹

³³ Charles Cist, *Cincinnati in 1841* (Cincinnati, 1841), 80-81; *Cincinnati Gazette*, September 14, 1850; "Dayton, Ohio," *Hunt's Merchants' Magazine*, XXVI (May, 1852), 572-77; Ohio, "Report of the Commissioner of Statistics for 1857," 39. Macadamized pavement was named for its inventor John L. McAdam, who introduced it in England in 1815. It consisted of a firm base of large rocks overlaid with layers of progressively smaller stones. The whole surface was bonded together by the weight of passing vehicles and by a crude cement of stone dust and water. Guillet, *The Story of Canadian Roads*, 65-66.

³⁴ Willis F. Dunbar, *Michigan Through the Centuries* (2 vols., New York, 1955), I, 224-25; Balthasar H. Meyer, dir., *History of Transportation in the United States before 1860* (Washington, 1917), 300; Michigan Central Railroad, *Fourth Annual Report* (Boston, 1850), 16.

³⁵ William R. Holloway, *Indianapolis: A Historical and Statistical Sketch of the Railroad City* (Indianapolis, 1870), 90; Poinsatte, *Fort Wayne during the Canal Era*, 242-44.

³⁶ *Indiana, Documentary Journal* (1849-1850), 96; *Indianapolis Journal*, October 9, 1849.

³⁷ *Madison Courier*, December 4, 1850; *Indianapolis Indiana Statesman*, October 2, 1850.

³⁸ Owen, *Treatise*, 1-2, 37, 41; Richard Leopold, *Robert Dale Owen* (Cambridge, Mass., 1940), 266.

³⁹ *Second Annual Report . . . Central Plank Road Company*, 4.

A
BRIEF PRACTICAL TREATISE
ON THE
CONSTRUCTION AND MANAGEMENT
OF
PLANK ROADS,

BY
ROBERT DALE OWEN.

WITH AN APPENDIX CONTAINING THE GENERAL PLANK ROAD LAWS OF NEW
YORK, KENTUCKY, INDIANA AND ILLINOIS, AND THE AMENDMENTS
THEREIN UP TO THE SESSION OF 1849-50. ALSO, THE
OPINION OF JUDGE GRIDLEY OF THE NEW YORK
SUPREME COURT IN THE CASE OF BEN-
EDICT VS. GOIT.

NEW ALBANY:
KENT & NORMAN, PUBLISHERS.
1850.

Newspapers continued to propose new projects in 1852 and 1853, and plank roads served most of the state's larger towns, from Madison, New Albany, and Jeffersonville in the south to Michigan City, South Bend, and Fort Wayne in the north.⁴⁰

The timing of the plank road fervor in Illinois was much like that in Indiana. The state's first such road was finished near Chicago in September, 1848.⁴¹ Its financial success set off a wave of charter applications to which the General Assembly responded by passing a general plank road incorporation law early in 1849.⁴² During the next three years plank roads were built into surrounding farm lands from most of the important towns in the northern part of the state.⁴³ Newspapers reported that the roads returned excellent profits and that their stock was in great demand.⁴⁴ Even as interest in railroads began to take hold, editors continued to diagnose the existence of a "plank road fever," and perhaps 600 miles were put into operation by the end of 1851.⁴⁵

Wisconsin experienced a similar burst of plank road agitation in 1848. Newspapers were filled with letters and reports of meetings in the wake of the financial success of the state's first plank road, and the territorial legislature incorporated sixteen companies.⁴⁶ The state Senate's Committee on Internal Improvements reported that "the public mind throughout the state is largely occupied with the subject of road improvements" and recommended to those interested in detailed information about the economic value, financial prospects, and construction of plank roads a well researched report prepared by Philo White and presented to the territorial Council earlier in the year.⁴⁷ In the next several years lake towns built numerous roads into the grain growing counties in the center of the state and attri-

⁴⁰ *Indianapolis Sentinel*, July 13, 1853; *Indianapolis Journal*, January 29, 1852; *Indianapolis Locomotive*, May 8, 1852; *Madison Banner*, August 26, 1851; *Colton's Map of the State of Indiana* (New York, 1853); Richard S. Fisher, *Indiana: In Relation to its Geography, Statistics, Institutions, County Topography, Etc.* (New York, 1852), 36.

⁴¹ *Chicago Tribune*, December 28, 1850.

⁴² Milo M. Quaife, *Chicago's Highways Old and New* (Chicago, 1923), 132; Arthur C. Cole, *The Era of the Civil War, 1848-1870* (Springfield, 1919), 28.

⁴³ Judson F. Lee, "Transportation as a Factor in the Development of Northern Illinois Previous to 1860" (Ph.D. Dissertation, Department of History, University of Chicago, Chicago, 1917), 30; *Galena Gazette*, October 29, 1849; *Joliet Signal*, April 10, 1849; *Springfield Register*, January 28, 1850.

⁴⁴ Ruby Yetter, "Some Aspects in the Commercial Growth of Chicago, 1835-1850" (M.A. Thesis, Department of History, University of Chicago, Chicago, 1937), 58; Quaife, *Chicago's Highways*, 132; *Chicago Democrat*, July 31, 1850.

⁴⁵ *Springfield Register*, February 20, 1850; *Gem of the Prairie*, March 8, 1851; Cole, *The Era of the Civil War*, 28.

⁴⁶ Still, *Milwaukee*, 51; Meyer, *History of Early Railroad Legislation in Wisconsin*, 220; Moses Strong, *History of the Territory of Wisconsin, from 1836 to 1848* (Madison, 1885), 591-92.

⁴⁷ "Report of the Committee on Internal Improvements," Wisconsin, *Senate Journal* (1848), 57; "Report of Mr. White, on the Subject of Plank Roads."

buted much of their growth to "the advantage of a plank road."⁴⁸ Many of the projects were backed by prominent citizens, and few had trouble raising needed funds, especially after the legislature voted to allow municipalities to purchase the stock of such corporations. As Wisconsin booster, John Gregory, wrote in 1853, "it would be difficult to enumerate all the plank roads built, in progress, and in contemplation."⁴⁹

The craze for plank roads in Iowa and Missouri was less widespread and of shorter duration than in the states of the Old Northwest. The first charters in Missouri were issued in 1849, and activity reached its height in 1851 when the legislature set up standard procedures for "the formation of associations to construct plank roads."⁵⁰ In the same year interest also peaked in Iowa as the various Mississippi River towns sought to tap the valleys of the Des Moines and Iowa rivers. In the town of Burlington, a center of the craze, promoter James Grimes wrote to his father in February, 1851: "We have a great railroad and plank-road fever here now. We have nearly completed a plank-road thirty miles west of this place. I am president of the company . . . and I think it will pay well." As in Missouri, however, interest in plank roads began to dwindle almost as the first roads were finished. Only fifty miles of road were actually laid and the state chartered only fourteen companies during the entire course of the enthusiasm.⁵¹

Besides building plank roads during the late forties and early fifties, westerners also discussed at length their value and advantages. Some writers were so carried away that they praised the innovation as one of the great improvements of the age. A Burlington correspondent linked them with railroads and steamboats as one of the century's greatest inventions, and an Illinoisian wrote simply: "God bless the man who invented the plank road." In St. Louis the *Intelligencer* contended that the general plank road law was the most significant

⁴⁸ *Western Journal and Civilian*, IX (October, 1852), 26; John Gregory, *Industrial Resources of Wisconsin* (Chicago, 1853), 300-306; Daniel S. Curtiss, *Western Portraiture and Emigrants' Guide: A Description of Wisconsin, Illinois, and Iowa* (New York, 1852), 38, 40, 52.

⁴⁹ Gregory, *Industrial Resources of Wisconsin*, 239; Alice E. Smith, *Millstone and Saw: The Origins of Neenah-Menasha* (Madison, 1966), 40-43; Marshall Strong to Richard Ela, July 13, 1849, in "Letters of Richard Emerson Ela," *Wisconsin Magazine of History*, XX (September, 1936), 82-85.

⁵⁰ David D. March, *The History of Missouri* (2 vols., New York, 1967), I, 599; North T. Gentry, "Plank Roads in Missouri," *Missouri Historical Review*, XXXI (April, 1937), 273.

⁵¹ Curtiss, *Western Portraiture*, 330; Glass, "Early Transportation and the Plank Road," 525-28; Brindley, *History of Road Legislation in Iowa*, 65-68; Boeck, "A Decade of Transportation Fever in Burlington, Iowa," 140, 143; quotation in Overton, *Burlington West*, 49. Grimes was elected governor of Iowa in 1854 and helped to organize the Republican party in that state; he was also a promoter of the Burlington Railroad and served in the United States Senate.

measure ever to come before the Missouri legislature.⁵² More practical writers stressed that plank roads were particularly suited to the needs of the West. The editor of the *Western Journal and Civilian* considered them "better adapted to the condition and general economy of our state, than any other mode of improvement yet discovered." The Wisconsin Senate's Internal Improvements Committee thought that the "peculiar adaptation of plank roads to the physical condition and business wants of Wisconsin" made them the "ne plus ultra" of road making. Owen summed up the same idea: "These roads are as certain to become universal in Indiana and other forest-covered States, as men are certain, when the choice between one dollar and five dollars is offered to them, to select the latter."⁵³

Westerners agreed with New York authorities in their appraisal of the economic functions of plank roads, believing that such highways would supply traffic for other lines of transportation. Governor Wright of Indiana, for example, asserted that they would become "the channels through which the surplus products of the country will find an outlet to the great thoroughfares of the state."⁵⁴ Missourians valued plank roads as potential feeders of their state's river commerce; Milwaukeans, as auxiliaries of the town's lake trade.⁵⁵ At Fort Wayne they were built "in aid of the business of the canal," and Chicagoans hoped that they would feed their city's canal boats, schooners, and freight cars.⁵⁶

Time and again western advocates emphasized that plank roads were not a substitute for railroads and assured their readers that a community which committed itself to improving its highways did not by that action forego its chance to be linked to the nation's growing rail net.⁵⁷ Conversely, enthusiasts argued that railroads could not themselves replace the plank road since farmers would still need good roads on which to haul their produce to rail depots and market towns.⁵⁸ Even the Michigan Central and Illinois Central railroads agreed with this latter opinion. The Michigan Central informed its stockholders

⁵² Letter to Burlington *Telegraph*, December 10, 1850, quoted in Brindley, *History of Road Legislation in Iowa*, 64; Letter to Peoria *Press*, 1853, quoted in Quaife, *Chicago's Highways*, 137; Doherty, "The Columbia-Providence Plank Road," 59.

⁵³ *Western Journal and Civilian*, II (January, 1849), 6; "Report of the Committee on Internal Improvements," 57; Owen, *Treatise*, 13.

⁵⁴ Indiana, *Documentary Journal* (1849-1850), 96.

⁵⁵ Curtiss, *Western Portraiture*, 40; *Western Journal and Civilian*, II (January, 1849), 6; March, *History of Missouri*, I, 600.

⁵⁶ *The Indiana Gazetteer* (Indianapolis, 1850), 155; Curtiss, *Western Portraiture*, 53; *Prairie Farmer*, X (July, 1850), 224; Springfield (Ill.) *Register*, March 13, 1851; Henry Brown, *Present and Future Prospects of Chicago: Address to the Chicago Lyceum*, Jan. 20, 1846 (Chicago, 1876), 7-8.

⁵⁷ Owen, *Treatise*, 17; Doherty, "The Columbia-Providence Plank Road," 57.

⁵⁸ "Report of Mr. White, on the Subject of Plank Roads," 327; *Prairie Farmer*, VII (April, 1847), 123; *Gem of the Prairie*, March 8, 1851; Indianapolis *Journal*, March 27, 1850.

in 1850 that the construction of a number of plank roads promised to give "all the advantage of so many branches, without the inconvenience and loss which generally result from . . . small branch Railroads"; in 1853 the management of the Illinois Central considered transporting free of charge lumber for plank roads built from its depot towns.⁵⁹ The consensus on the differing economic functions of the two modes of transportation was stated by Owen: "Each . . . has its appropriate sphere; the railway as a great, leading thoroughfare . . . the plank road to afford communication between smaller towns and villages, to form neighborhood and cross-roads, often at right angles to a railroad line, supplemental to it, and terminating at its stations."⁶⁰

These improved facilities for local transportation were expected to be especially valuable to farmers. Promoters of individual roads attempted with at least occasional success to muster financial support in the country through which their highways would pass by stating that land values would rise, that crops could be sold for a larger profit, and that it would become more feasible to market firewood in neighboring towns.⁶¹ Even writers with less of a personal interest at stake concurred that for all types of farmers "no scheme was ever devised that afforded so rich an assurance of immediate and positive benefits." A railroad executive agreed that "this kind of Road for moderate distances, appears better adapted to the wants of such an agricultural population as ours than any other."⁶²

Westerners realized that any enhancement of the ability of farmers to market their produce would also increase the business of the region's commercial centers. In Cleveland the *Daily True Democrat* asserted that the completion of plank roads to Wooster and Warren would help the city's trade more than all the railroads in contemplation. Fort Wayne citizens hoped that the construction of a system of plank roads to supplement the Wabash and Erie Canal would sharply increase the town's commerce; Chicagoans and Toledoans anticipated that their cities' roads would act as a tonic for an uneven retail trade.⁶³ At the same time residents of smaller centers saw in

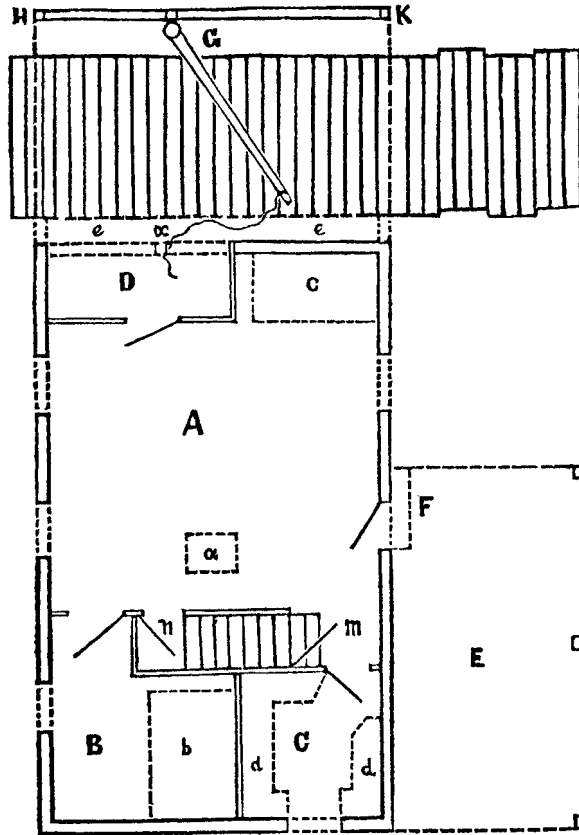
⁵⁹ Michigan Central Railroad, *Fourth Annual Report*, 7; Illinois Central Railroad, *Fourth Annual Report* (Chicago, 1854), 27. Also see *Exhibit of the Peoria and Oquawka Railroad Company* (New York, 1852), 7.

⁶⁰ Owen, *Treatise*, 17; see also Gregory, *Industrial Resources of Wisconsin*, 16.

⁶¹ Brindley, *History of Road Legislation in Iowa*, 63-64, 69-70; Owen, *Treatise*, 9-14. For a farmer who expected land values to rise, see Milo M. Quaife, ed., *An English Settler in Pioneer Wisconsin: The Letters of Edwin Bottomley, 1842-1850* (*The State Historical Society of Wisconsin Collections*, Vol. XXV; Madison, 1918), 203.

⁶² Ware, "Construction of Plank Roads," 177; see also "Report of Mr. White, on the Subject of Plank Roads," 311; Michigan Central Railroad, *Fourth Annual Report*, 16.

⁶³ Cleveland *Daily True Democrat*, November 18, 1848, quoted in *Annals of Cleveland*; Indiana *Gazetteer*, 155, 229; Chicago *Democratic Press*, *Review of Com-*



PLAN OF A TOLL GATE HOUSE FOR A PLANK ROAD.

SEE PAGE 73;

A, living room; c, recess for single bed; B, bedroom; b, bed; C, pantry; d, shelving; D, portico; E, summer kitchen; G, toll bar covered; HK, end of roof; a, stove chimney; e, steps; m, attic landing; n, cellar landing. Cost estimate was \$350 to \$400. Owen, *Treatise*, 73-74.

Reproduced from Robert Dale Owen, *A Brief Practical Treatise on the Construction and Management of Plank Roads* (New Albany: Kent & Norman, Publishers, 1850), frontispiece. Courtesy Lilly Library, Indiana University, Bloomington.

plank roads a means by which they could contest for the commercial mastery of agricultural hinterlands. While Chicago, St. Louis, Cincinnati, and other cities contended with canals, railways, and steamboats for trade of entire states, lesser towns sought by rival highway improvements to become the commercial centers of their surrounding counties.

After describing the role which plank roads could be expected to play in the region's economy, western advocates customarily turned to the innovation's advantages over other transportation facilities. Apparently no one seriously claimed that plank roads were superior to railroads in their physical capacity to carry goods, but some writers did suggest that they were economically more practicable improvements for frontier communities. They could be built for about one tenth the cost of railroads and they were more practical for daily use because they could be successfully operated with a low volume of traffic.⁶⁴ In addition, plank roads were public thoroughfares open to all rather than incorporated monopolies whose profits enriched a few capitalists and whose policies might discriminate against individuals or communities.⁶⁵

Enthusiasts were more generally agreed that plank highways were in every way preferable to other types of roads. Plank road boosters usually dismissed dirt roads with the comment that a team could draw three times, or four times, or six times as much on a plank surface.⁶⁶ Proponents also claimed that plank roads were superior to the well regarded macadamized turnpikes because planks offered considerably less resistance to the passage of vehicles than did broken stone surfaces. They more often stressed, however, that plank roads were both easier and cheaper to build, especially in the level lands around the Great Lakes where stone was scarce and pine boards cheap.⁶⁷ Many discussions make it clear that plank roads were valued

merce for 1853 (Chicago, 1854), 53; Chicago Democrat, December 9, 1848, February 1, 1849; Toledo Blade, June 29, 1850, quoted in Downes, *Canal Days*, 93.

⁶⁴ Doherty, "The Columbia-Providence Plank Road," 58-69; "Report of Mr. White, on the Subject of Plank Roads," 304-306; *Western Journal and Civilian*, II (January, 1849), 5; Milwaukee Sentinel, January 6, 1848, quoted in Meyer, *History of Early Railroad Legislation in Wisconsin*, 220; Toledo Blade, March 25, 1848, quoted in Downes, *Canal Days*, 94; Chicago Democrat, February 16, 1848.

⁶⁵ Chicago Democrat, October 9, 1848; Meyer, *History of Railroad Legislation in Wisconsin*, 221, 259.

⁶⁶ Owen, *Treatise*, 77; Doherty, "The Columbia-Providence Plank Road," 53-54; Madison (Wis.) Argus, December 5, 1848, quoted in Benjamin H. Hibbard, *The History of Agriculture in Dane County, Wisconsin* (*Bulletin of the University of Wisconsin*, No. 101; Madison, 1904), 138.

⁶⁷ *Western Journal and Civilian*, IV (May, 1850), 73-76; Cleveland Herald, August 24, 1844, quoted in *Annals of Cleveland*; Indiana Statesman, October 2, 1850; "Report of Mr. White, on the Subject of Plank Roads," 310; Lee, "Transportation as a Factor in the Development of Northern Illinois," 33. Plank road enthusiasts in New York expressed identical opinions on the superiority of plank to gravel surfaces. Kingsford, *History*, 6-9; Gillespie, *Manual*, 249; "Report of the Committee on Roads and Bridges, in Relation to a General Law for Plank Roads," 7.

as a substitute for macadamized highways largely because they could be built with little money, little effort, and little skill in engineering.⁶⁸ They seemed, in other words, a perfect improvement to be adopted in the poor and underdeveloped states of the Middle West. As one writer said, "plank roads ought to be constructed where want of sufficient capital precludes the possibility of building a better."⁶⁹

Despite the ease of constructing plank roads and their undisputed value to the community, it is unlikely that many businessmen would have sunk money in them had there not been some basis on which to hope for a good return on the capital invested. The New York writers on whom westerners drew heavily for information customarily cited the favorable financial experience of New York companies and stressed that any heavily used road would surely yield a profit.⁷⁰ Western authorities, who placed considerable reliance on the reported success of early eastern roads, also found their expectations confirmed by the high dividends declared by the first roads in the vicinities of Chicago and Milwaukee.⁷¹ In the early fifties it was commonly thought that well made plank roads would be "monstrously" profitable; none would pay less than ten per cent, many would pay twenty per cent, and some were forecast to return thirty or forty per cent per year.⁷²

The hope that plank roads would yield a profit was predicated in part on their low initial cost. Even more, however, it was based on the belief that the surface of such a road would last for about ten years after it was laid. Western entrepreneurs could confirm this expectation by reference to eastern experts who agreed that softwood planks would last seven or eight years and hardwood almost twelve.⁷³ Early western writers, who had no firsthand experience on which to base their estimates, simply paraphrased New York authorities. They assured their readers that oak planking would last at least ten years and asserted that until complete renewal was necessary, repairs would cost only ten dollars per year for each mile of road.⁷⁴ It was on such

⁶⁸ Owen, *Treatise*, 90-92; Gregory, *Industrial Resources of Wisconsin*, 240-41; Madison (Ind.) *Banner*, April 4, 1850; Indiana, *Documentary Journal* (1849-1850), 96.

⁶⁹ Gregory, *Industrial Resources of Wisconsin*, 15; Strong, *History of the Territory of Wisconsin*, 591. It is interesting to note that no effort was made to substitute plank roads for the existing network of macadamized turnpikes around Cincinnati. The failure suggests that despite its higher initial cost, gravel provided a more efficient and long lasting surface.

⁷⁰ Kingsford, *History*, 10; Gillespie, *Manual*, 247, 251.

⁷¹ Curtiss, *Western Portraiture*, 53; Owen, *Treatise*, 85; *Chicago Democrat*, October 2, December 9, 1848; "Report of Mr. White, on the Subject of Plank Roads," 326-27.

⁷² *Indiana Statesman*, October 2, 1850; *Gem of the Prairie*, March 8, 1851; Quaipe, *Chicago's Highways*, 132.

⁷³ Kingsford, *History*, 10; Gillespie, *Manual*, 248; "Report of the Committee on Roads and Bridges, in Relation to a General Law for Plank Roads," 5.

⁷⁴ Ware, "Construction of Plank Roads," 176; Owen, *Treatise*, 83; "Report of Mr. White, on the Subject of Plank Roads," 323; O. G. Gates, Secretary of the Ken-

sanguine estimates that many companies based their calculations of the profits they could anticipate and the funds they would need for repairs.⁷⁵

As plank road companies began to discover in the early fifties, however, planks decayed with unexpected rapidity. To be sure, westerners were aware that it was imperative to guard against deterioration. Since it was thought that the presence of air underneath a road reduced its life by as much as two thirds, authorities warned particularly that "*the plank should rest solidly and immoveably on the ground.*"⁷⁶ When the first roads wore less well than anticipated, plank road advocates retained their optimism and proposed that the unexpected problem could easily be overcome. They advocated the use of oak instead of pine and recommended the avoidance of heavy stringers which might hold the planks off the ground.⁷⁷ In fact, however, such simple measures could not take care of the problem of decay. In the soggy prairies, where plank roads were popular, it proved impossible to keep the roads properly drained. At times, spring floods even floated planks off roadbeds and scattered them over the countryside. When the rains abated, the sun warped and twisted planks until the roads were unusable. Under such conditions, many plank pavements disintegrated in less than two years.⁷⁸

The effects of such unexpectedly rapid deterioration were disastrous for many plank roads. Since most companies had expected to get close to a decade of service from their planks, few had made any effort to set aside a sinking fund adequate to repave their roads within a few years. Some firms, seeing a bleak future ahead, paid out all their earnings as dividends. Other roads lacked enough revenue to meet even the low costs of day to day operation. As planks rotted, traffic declined and farmers became less and less willing to pay tolls, leaving the corporations with even less money for maintenance and with no hope for future profits. In many instances firms escaped this hopeless spiral by abandoning their roads entirely, leaving the boards

tucky Board of Improvements, "Report," *DeBow's Review*, IX (September, 1850), 336.

⁷⁵ "Report of the Directors of the Dubuque and Sageville Plank Road Company," *Annals of Iowa*, XXII (July, 1939), 79; Letter to Columbia (Mo.) *Weekly Statesman*, quoted in Doherty, "The Columbia-Providence Plank Road," 68.

⁷⁶ Owen, *Treatise*, 55, 55-60; see also Ware, "Construction of Plank Roads," 176.

⁷⁷ *Prairie Farmer*, XI (August, 1851), 253-54; Ware, "Construction of Plank Roads," 172-77; Letter from the president of a Chicago plank road company, in *Prairie Farmer*, IX (June, 1849), 191; *Chicago Tribune, Review of Commerce for 1851*, in *Hunt's Merchants' Magazine*, XXVI (April, 1852), 442; *Gem of the Prairie*, June 21, 1851.

⁷⁸ Quaife, *Chicago's Highways*, 135-36; *Prairie Farmer*, XI (August, 1851), 253-54, 401; Gentry, "Plank Roads in Missouri," 274, 281; Berry R. Sulgrove, *History of Indianapolis and Marion County, Indiana* (Philadelphia, 1884), 15.

to be confiscated for fences and the roadbed to be cared for by the county.⁷⁹

The experience of the Central Plank Road Company of Indiana shows the way in which financial problems doomed such thoroughfares. Organized in 1849 to plank the segment of the National Road passing through Hancock, Marion, Hendricks, and Putnam counties, the corporation quickly ran into difficulties. The initial cost of the road was high, averaging \$2,300 per mile, and receipts were low. The road returned profits of only ten per cent even when no allowance was made for the replacement of planks, and as early as 1851 the firm's officers questioned whether it would be possible to finance repaving. At the same time the management had to cope with a controversy over the collection of tolls near Indianapolis. Within a few years much of the surface had rotted or had been removed, and the company had abandoned efforts to overcome its problems. The Indianapolis *Freie Presse* complained: "Fürs Halsbrechen Zoll zu bezahlen, ist etwas hart."⁸⁰

Because of the prohibitive cost of maintaining a usable surface, plank roads vanished from most parts of the West as rapidly as they had appeared. Apparently, no new roads were commenced after 1854 in Ohio, Indiana, Illinois, Missouri, or Iowa. By 1855 most Indiana roads had been abandoned and only 150 miles were operating in Illinois. Two years later Ohio had only thirty-nine miles in use.⁸¹ Similarly, most roads in Missouri and Iowa were forsaken by the middle of the decade. By 1858 a western paper could use "worn-out plank-road" as a synonym for something dead and useless.⁸²

⁷⁹ Waukegan *Gazette*, July 19, 1851; Quaife, *Chicago's Highways*, 137; Leopold, *Robert Dale Owen*, 267. Illinois responded to this problem by allowing plank roads to be absorbed or replaced by railroads. *Chicago Democratic Press*, March 3, 1855. Indiana prohibited the collection of tolls on roads in bad repair and along with Wisconsin authorized counties to take over abandoned roads. Logan Esarey, *A History of Indiana* (2 vols., Indianapolis, 1918), II, 840-41; "Road Improvements in Indiana," *Indiana Magazine of History*, III (June, 1907), 83; State Highway Commission of Wisconsin, *A History of Wisconsin Highway Development* (Madison, 1947), 17.

⁸⁰ Indianapolis *Locomotive*, March 1, 8, 1851; *Second Annual Report . . . Central Plank Road Company*, 4-8; Indianapolis *Freie Presse*, December 4, 1856, February 12, 1857. "It's a hard thing to pay a toll to break your neck."

⁸¹ Esarey, *History of Indiana*, II, 839-41; Ohio, "Report of the Commissioner of Statistics for 1857," 73-74; Illinois, *Illinois Reports* (1855).

⁸² Madison (Ind.) *Courier*, April 14, 1858. Canadian and New York plank roads also ran into trouble in the early fifties for the same reasons—rapid deterioration of the surfaces and lack of adequate provisions for keeping them in repair. In 1854, only seven years after the enactment of the general incorporation law which had given the enthusiasm its first official sanction, the New York legislature passed a bill permitting plank road companies to abandon their roads or to resurface them with gravel. Almost all eastern companies which survived the middle of the decade were destroyed by the Panic of 1857. Durrenberger, *Turnpikes*, 151; Guillet, *The Story of Canadian Roads*, 71; George R. Taylor, *The Transportation Revolution* (New York, 1951), 31; J. L. Ringwalt, *Development of Transportation Systems in the United States* (Philadelphia, 1888), 167.

In the upper Midwest, on the other hand, plank roads survived a few years longer. Six new roads were chartered in Minnesota in 1854 and thirty-three in Wisconsin between 1854 and 1856; at least 300 miles of plank highway were still in use near Detroit in 1855.⁸³ In the later fifties, however, the roads were also abandoned in the lower parts of these states, "for however valuable they might be as wagon roads, for a limited distance," they were unable to meet the needs of rapidly growing commercial cities.⁸⁴ Only in the counties bordering the Michigan and Wisconsin pineries did the cheapness of lumber make possible the continued construction of plank roads.⁸⁵

From start to finish, therefore, the enthusiasm for plank roads lasted for little more than a decade in the Middle West. Despite the initial interest in 1845 the real onset of the craze awaited the apparent success of the first New York roads in 1846 and 1847, the publicity given these roads by *Hunt's Magazine* and Gillespie's *Manual*, and the passage of the New York plank road law, which may have seemed a kind of official seal of approval. Certainly western advocates in the late forties found it useful to stress the prosperous outcome of the experiment in the East. The center of the excitement, moreover, lay along the shores of the Great Lakes, where contact with New York and Canada was most frequent. From 1845 through 1848 interest centered in the flat, wet lands of northern Ohio, northern Indiana, eastern Wisconsin, and Michigan, spreading into hillier areas across the Mississippi and in the Ohio Valley only in 1849 and 1850.⁸⁶

The rapid dissipation of interest in 1853, 1854, and 1855 can be attributed in large part to the fact that roads built in the first years of the fad had begun to reveal their drawbacks by the early fifties. At the same time, railroads crowded plank roads from the public mind. By 1854 and 1855 every small town had its railroad hopes and its railroad projects which absorbed capital and entrepreneurial talent that a few years earlier would have been devoted to the promotion of plank roads. Only in areas where lumber was extraordinarily cheap did the outmoded improvement last beyond 1857.

The eagerness with which westerners seized upon the idea of plank roads clearly reflected the miserable condition of the region's

⁸³ *Fifth Annual Minnesota Yearbook for 1855* (St. Paul, 1855), 18; Wisconsin Highway Commission, *A History of Wisconsin Highway Development*, 228-30; Robert E. Roberts, *Sketches of the City of Detroit* (Detroit, 1855), 43.

⁸⁴ Smith, *Millstone and Saw*, 43-44, 50; Edward D. Holton, *Commercial History of Milwaukee* (*The State Historical Society of Wisconsin Collections*, Vol. IV; Madison, 1857-1858), 275.

⁸⁵ In Wisconsin one or two plank roads were chartered each year between 1857 and 1866. Wisconsin Highway Commission, *History of Wisconsin Highway Development*, 228-30. For Michigan see references to plank roads in a veto message of 1867. George N. Fuller, ed., *Messages of the Governors of Michigan* (4 vols., Lansing, 1925-1927), II, 613-15.

⁸⁶ *Chicago Tribune*, December 28, 1850; *Galena Gazette*, October 24, 1849.

common roads and the exorbitant cost of moving goods between farms and local markets. Americans were well aware, as one plank road advocate put it, that "no country can prosper as long as its farmers and miners haul their products and imports on wagons over natural roads."⁸⁷ To a large extent the very seriousness of the problem contributed to the failure of plank roads by disposing otherwise sober businessmen to receive a potential solution with too little common sense and too many optimistic miscalculations. In any event, the discrediting of plank roads in both East and West "left most short-haul transportation literally stuck in the mud, there to remain until the later age of the rigid-surface road and the internal combustion engine."⁸⁸

⁸⁷ *Western Journal and Civilian*, IV (May, 1850), 72.

⁸⁸ Taylor, *The Transportation Revolution*, 31.