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THE DEVELOPMENT OF THE MINNESOTA ROAD SYSTEM

By

Arthur J. Larsen

Superintendent, Minnesota Historical Society

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Arthur J. Larsen

Head of the Newspaper Department,
Minnesota Historical Society

ABOUT THE AUTHOR

DR. ARTHUR J. LARSEN is a graduate of the University of Minnesota and holds a Ph.D. degree in history from that institution. This volume constituted his doctoral thesis.

Mr. Larsen was born in Iowa in 1903. In 1928 he joined the staff of the Minnesota Historical Society, and the following year became curator of the Society's newspaper department, a position he held until 1939. In 1940 he became superintendent of the Society.

Two years later Mr. Larsen entered the Army Air Force as a first lieutenant. During World War II he served in Canada and as a historical officer for the Continental Air Force, rising to the rank of major. He was discharged in 1945 and returned to his position in Minnesota.

In July, 1947, Dr. Larsen resigned from the Society to accept a commission in the regular Army as a major in the Air Force. For the next ten years he served in the office of the air historian in Washington, D.C.

In 1957 Dr. Larsen returned to Minnesota and joined the history faculty of the University of Minnesota, Duluth. He became an associate professor in 1958 and a full professor in 1964. He lives at 2545 Anderson Road, Duluth.

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PREFACE

Within the space of the century covered by this study, from the days of the French coureurs de bois, who in the early years of the nineteenth century scarred the western prairies with the trails made by their unwieldy ox carts, to the adoption of the good roads amendment of 1920, the Minnesota version of the American drama of state making was enacted. First to penetrate to the wilderness home of the Indians were the traders, missionaries, and soldiers. They were the advance guard for the invasion of civilization -- pioneer farmers, lumbermen, frontier businessmen, and land speculators who, at the mid-point in the nineteenth century, opened the land to settlement. The pioneer stage was followed by a period of agricultural development, when Minnesota was the breadbasket of the nation. Finally, as the period covered by this volume closes, Minnesota, like other American regions, was growing into an industrial state.

These stages in the development of the Minnesota commonwealth were reflected in the story of its roads. The fur traders left a heritage of picturesque Red River carts and the trails which they wore in the Minnesota sod. The soldiers, lumbermen, and pioneer settlers

opened a labyrinth of paths of communication -- military roads, rough logging trails, and wagon roads. The agricultural era left its mark on Minnesota by straightening those crude trails, for practice decreed that, unless insuperable obstacles prevented, roads should follow section lines. But the agricultural era of Minnesota history left a legacy of poor roads. It was the age of mud and the statute labor tax. The dawning industrial age produced a profound change in Minnesota road conditions, however, for with the coming of the bicycle and the automobile, vastly different and better roads were needed. These products of the new day drove the state -- along with the nation -- into the era of concrete roads, hot dog stands, and billboards.

Such in brief is the story that the following pages tell. The sources from which this study of the development of the road system in Minnesota is drawn are varied in character. Government archives -- federal, state, and local -- manuscript diaries, letters, and other records, reminiscence sketches and biographies, accounts of travel and description, state and local histories, printed and manuscript maps, periodicals and newspapers -- all played important parts in supplying information. Most of the material is contained in the invaluable collections of the Minnesota Historical Society.

It is no more than fitting in these first pages that the author should acknowledge his debt to his mentor

and superior, Dr. Theodore C. Blegen, professor of history at the University of Minnesota and secretary and superintendent of the Minnesota Historical Society, without whose wise counsel and friendly criticism it is difficult to conceive how this study could have been made. To Mr. Walter F. Rosenwald, veteran of many years of service in the Minnesota Highway Department, and now director of safety for that department, another heavy debt is owed for his helpful suggestions as to the scope and content of the later chapters. My wife alone understands how much her assistance and encouragement have meant in bringing the work to completion. To them, and to those others who have contributed advice, encouragement, or criticism, must go much of the credit for such excellence as the work possesses.

Arthur J. Larsen

Minnesota Historical Society
St. Paul

I. THE ROADS OF PRE-TERRITORIAL MINNESOTA

"The history of roads and thoroughfares is the history of the commerce, of the population and settlement of every state and kingdom in the world. The roads and thoroughfares were first discovered, and mankind in their migrations and wanderings followed them." It was with these words that Judge Bradley B. Meeker addressed the members of the Benton County Agricultural Society at their annual meeting, held in the frontier town of Sauk Rapids in Minnesota Territory during the summer of 1855.¹ He spoke on a subject that was dear to the hearts of his listeners, for they felt the blighting touch of isolation and recognized the magnitude of the task of blazing paths to the new frontier. For more than half a decade already, the struggle to open roads had been carried on by pioneers few in number and impoverished in circumstance. Yet, filled with the high hopes or blind desperation which have characterized the history of the frontier, they persevered in their labor. Each year the strength of their army was augmented by fresh arrivals, and in the end they were successful, for in that vast new territory at the headwaters of the Mississippi no fewer than 160,000 persons found their homes during the brief space of a decade after 1849.

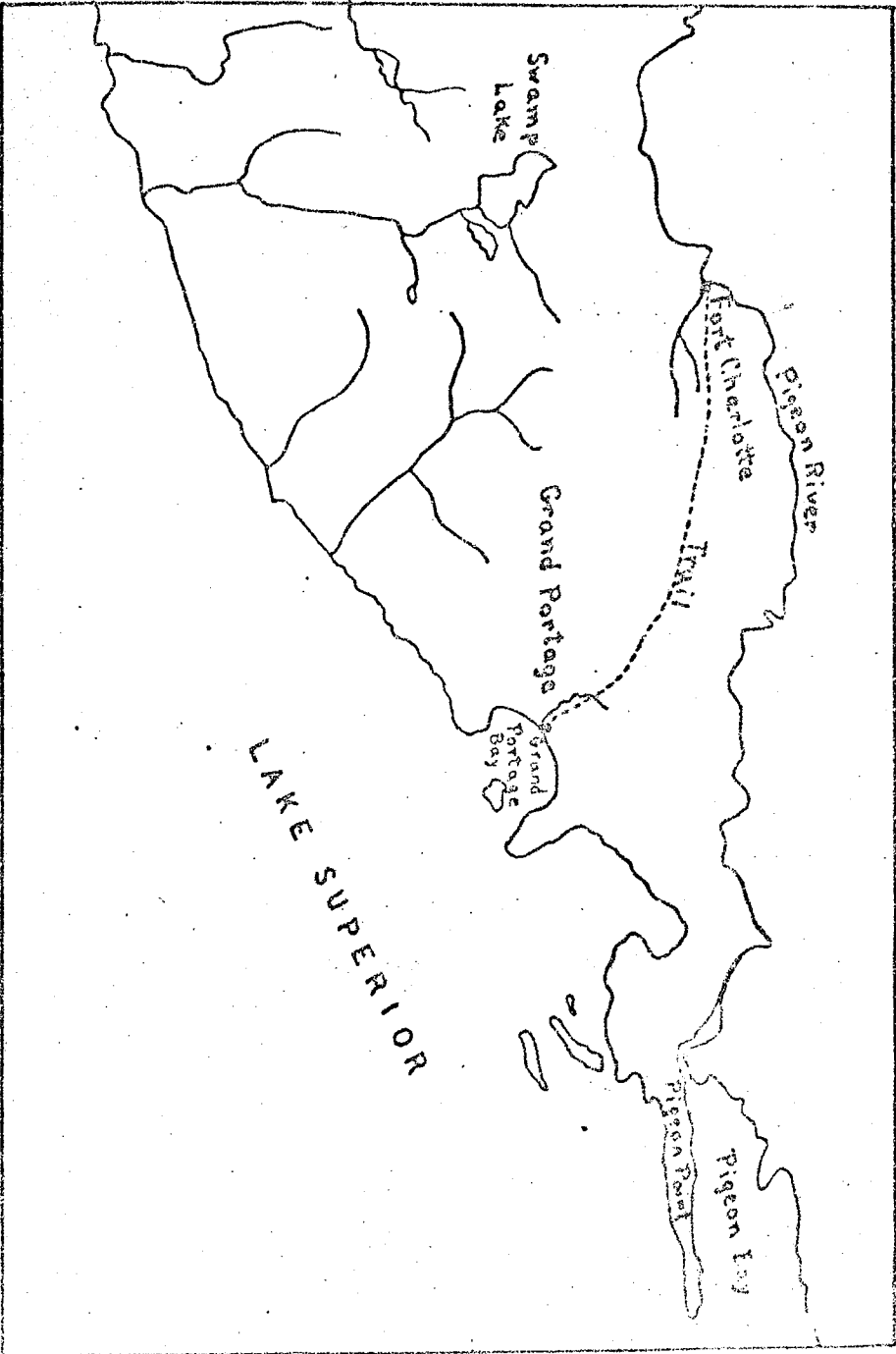
1. St. Anthony Express, July 7, 1855.

It was fortunate for the pioneers of 1849 that they did not have to start empty-handed. For centuries the Minnesota region had been the home of red men who, in their endless roving, had worn a myriad of trails through the wilderness. For two hundred years white men had been passing to and fro in the Minnesota country, and during the last half century the evidences of the journeying had become increasingly perceptible. Great trading corporations -- the Hudson's Bay Company and the American Fur Company -- and numerous independent traders had long exploited the vast crop of furs gathered in the wilderness. In the furtherance of their trade they established settlements toward which beaten tracks led from all sections of the territory.

The earliest trails used by the traders were undoubtedly those made by the Indians, and perhaps the most famous of these was the Grand Portage, a trail which led through nine miles of rocky wilderness and permitted travelers on Lake Superior to continue their trip by canoe on the waters of the Pigeon River above the series of falls which obstructed the last part of its course. Over this route a traveler could pass, with but a few portages, from the waters flowing into the St. Lawrence drainage system to those flowing into Hudson Bay. Who the first white men to use the Grand Portage were is unknown, but Verendrye, passing that way in 1731, left a written record of it, and in the years that followed it became a meet-

ing place toward which all paths were directed. The period of its greatest use was during the score of years after 1783, when the Northwest Company had its depot there. It was not uncommon for upwards of a thousand persons to congregate at this one point during that period, when the total number of white men in the whole northwestern part of North America cannot have numbered many thousands. The trail over which was borne the fur produce of a great portion of the continent was worn deep by the feet of the voyageurs during those years. In 1788 the Northwest Company asked the provincial council at Quebec for a grant of land to enable it to construct a wagon road over the trail, but the request was denied. The road was made in later years, probably in 1816, and ox carts traveled over it from Grand Portage Bay to Fort Charlotte on the Pigeon River, and thence to Fort William, a distance estimated to be thirty-six miles. This highway was abandoned by later generations of travelers in favor of other routes, but its fame remains as the white man's first road in Minnesota. ²

2. The best account of the Grand Portage is to be found in Solon J. Buck, "The Story of the Grand Portage," in Minnesota History Bulletin, 5: 14-27 (February, 1923). Dr. Buck states that the road may have been laid out by a detachment of British soldiers during the American Revolution (p. 19). In Papers Relating to the Red River Settlement: 1815-1819 (London, 1819), there is an account of a winter road from Fort William to Grand Portage, made in the fall of 1816 (p. 68). See also William H. Keating, Narrative of an Expedition to the St. Peter's River, Lake Winnepeg, Lake of the Woods, &c., Performed in the Year 1823, under the Command of Stephen H. Long, 2: 142 (London, 1825); James H. Baker, "History of Trans-



THE GRAND PORTAGE

In the Red River Valley the Hudson's Bay Company reached as far south as Lake Traverse, where Robert Dickson established a post in 1789. Dickson, it is said, brought his supplies to this far southern point from the English posts on the lower Red River "in carts made for the purpose," four or five days being required for the journey. Throughout the Red River country, the Hudson's Bay Company had posts, the supplies for which were carried in the carts made by the people of this far-off frontier. As a consequence, a well-defined series of trails reached all parts of the valley and extended beyond it to tap near-by regions. One trail led as far afield as Minday Wakon, or Devil's Lake; another led from Pembina to the post of the Hudson's Bay Company

portation in Minnesota," in Minnesota Historical Collections, 9: 9 (St. Paul, 1901). Next to the Grand Portage, perhaps the most famous was the Savanna Portage connecting the waters of the St. Louis and Mississippi rivers. See Irving H. Hart, "The Old Savanna Portage," in Minnesota History, 8: 117-139 (June, 1927). Other important portages were located between Lake Traverse and Big Stone Lake, between the lakes at the head of Leaf River and Otter Tail River, between Lake Julia and Turtle Lake, and between the Bois Brulé River and St. Croix Lake at the head of the St. Croix River. Accounts of their use by travelers are frequent. The Red River expedition which carried grain to the Red River settlement from Prairie du Chien in 1820, for example, passed over the Lake Traverse-Big Stone Lake portage. Post, p. 6. Captain John Pope returned from his Pembina expedition in the fall of 1849 by way of the Leaf Lake portage. Pope, Report of an Exploration of the Territory of Minnesota, 39 (31 Congress, 1 session, Senate Executive Documents, no. 42 -- serial 558). Giacomo C. Beltrami, on his return to Fort Snelling in 1823, followed the Lake Julia route, and the Sieur du Lhut made use of the Bois Brulé-St. Croix Lake portage on his Minnesota trip in 1680. William W. Folwell, A History of Minnesota, 1: 24, 109-111 (St. Paul, 1921).

at Red Lake, which was established as early as 1818. ³

The establishment of Fort St. Anthony, later known as Fort Snelling, at the mouth of the Minnesota River in 1819 gave American traders confidence to expand their trade in the area. As a result, the posts of the Americans multiplied in number, and the American Fur Company designated its post opposite the new fort as the headquarters for the upper Mississippi country. As all paths of the British traders led to Fort Garry, so all paths of the American traders led to Mendota. ⁴

It was not until the decade of the twenties in the nineteenth century that any great communication between the two centers of population in the Minnesota country was begun. The first trade between them reputedly was in the winter of 1819, when a deputation of settlers from Lord Selkirk's starving colony in the Red River country made a journey to Prairie du Chien in search of

3. Louis A. Tohill, Robert Dickson, British Fur Trader on the Upper Mississippi, 9, 16 (Ann Arbor, 1926); John P. Pritchett, "Some Red River Fur-Trade Activities," in Minnesota History Bulletin, 5: 407, 408 (May, 1924); Grace L. Nute, "The Red River Trails," in Minnesota History, 6: 280 (September, 1925); Nute, ed., "The Diary of Martin McLeod," in Minnesota History Bulletin, 4: 394n (August-November, 1922); Nute, "New Light on Red River Valley History," in Minnesota History Bulletin, 5: 567 (November, 1924); George W. Featherstonhaugh, A Canoe Voyage up the Minnay Sotor, 2: 13 (London, 1847).

4. The post was first known as St. Peter's. The name Mendota was not applied to it until about 1837. Warren Upham, Minnesota Geographic Names, 166, 227 (Minnesota Historical Collections, vol. 17 -- St. Paul, 1920).

grain. The southward journey was made in winter by land, but the return voyage was deferred until the spring of 1820, when it was possible to travel by boat on the Minnesota and Red rivers. In 1821 Alexis Bailly, the shrewd trader in charge of the American Fur Company post at Mendota, drove a small herd of cattle through the wilderness to the Red River colony to sell to the settlers there. The route he followed is not definitely known, but it probably led up the Minnesota River to Big Stone Lake, and thence, by way of Lake Traverse, into the valley of the Red River. The intercourse between the American and British settlements was not restricted to a trade in agricultural supplies. In spite of strict interdiction, the half-breed independent traders of the British settlement carried on a clandestine trade with the American fur buyers, and in 1822 the officials of the Hudson's Bay Company themselves made arrangements for the purchase of American products, which likewise were delivered over the Red River route. ⁵

It is probable that the Americans trading in the upper portion of the Minnesota Valley, where they fre-

5. Folwell, Minnesota, 1: 215-217; Henry H. Sibley, "Reminiscences; Historical and Personal," in Minnesota Historical Collections, 1: 383 (St. Paul, 1902); Pritchett, in Minnesota History Bulletin, 5: 409. At least two other herds of cattle were driven to the Red River, one in 1822 and the other in 1825. The latter consisted of four or five hundred cattle. Hattie Listenfelt, "The Hudson's Bay Company and the Red River Trade," in North Dakota Historical Collections, 4: 252 (Fargo, 1913).

quently came in contact with the British traders, made use of carts such as the British traders used from the time of their first dealings with them. Certainly it was more convenient to transport goods on the prairies by carts than by pack horses or by human pack carriers. For conveying cargoes of furs to the depot at Mendota and returning with needed supplies, however, the Americans on the Minnesota River used boats or canoes. The first appearance of the cart in the American trade -- if we may believe Joseph R. Brown, who for many years was a trader on the frontier -- was in 1823. At that time, according to Brown, Philander Prescott located a trading post at Traverse des Sioux, where the Minnesota River "could be reached with carts from the west without cutting a road through the woods." He further stated:

Previous to the days of the Columbia Fur Company, carts were unknown on the St. Peters; and either bark canoes or Mackinaw boats were used for taking supplies to Little Rock, Lac qui Parle, &c., and the trading posts were generally at White Rock, Le Sueur, Henderson, &c., below the Traverse, and the intercourse of the Indians of Lac qui Parle with those of the St. Peters was by a road which is yet frequently travelled, between Rush, and High Island rivers. The introduction of carts into the Indian trade shortened water communication and very materially diminished the length of time necessary for the trip to the upper country. The Traverse became the depot for the upper trade, and was the first summer trading post above the mouth of the Minnesota.⁶

6. Minnesota Pioneer (St. Paul), April 7, 1853. The article quoted is not signed, but it was published while Brown was editor of the Pioneer and so strongly resembles

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An unidentified traveler through the American Northwest during the summer of 1844 tells of meeting at Traverse des Sioux an Irishman named Peter Haydn, who was a pioneer over the Red River trails, having "made probably twenty journeys across this vast country, with a train of carts." If this traveler was right in his statement that the cart caravans made but one trip each year, leaving the Red River country in May and returning again in September, the approximate date for the opening of through traffic over the Red River trail is 1824. In the light of Brown's statement concerning the date of and purpose for establishing a post at Traverse des Sioux, it is perfectly possible that the information is reliable. This American traveler joined Haydn at Traverse des Sioux in September, 1844, and traveled with his train for several days on the return trip to the Red River. Two specific points along the route mentioned by him assist in identifying the route followed by the train. One stop was made at the "Petit Rochelle" or Little Rock River, which flows into the Minnesota River from the north near Fort Ridgely.

other writings of his that there is little room for doubt that he was the author of the editorial. The Columbia Fur Company was organized in 1822, and its traders operated in the upper Minnesota Valley until 1827, when it was absorbed by the American Fur Company. Folwell, Minnesota, 1: 190. High Island Creek has its source in the southwesternmost township of McLeod County and runs in an easterly direction through Sibley County to the Minnesota River, a short distance north of Henderson. Rush River likewise flows eastward through Sibley County to the Minnesota River, a short distance south of Henderson. Upham, Geographic Names, 319, 520.

The other point mentioned is the Pomme de Terre River, which likewise flows into the Minnesota River from the north, a short distance above Lac qui Parle. ⁷

For many of the settlers in the Red River settlement, the trail to Traverse des Sioux offered a line of escape from the horrors of starvation and privation which beset the members of Lord Selkirk's colony. When Alexis Bailly returned to Mendota after his stock-selling venture in 1821, he is said to have brought with him five families which had become discouraged with conditions at the settlement. When the Long expedition passed through the country in 1823 on its way to the international boundary, it encountered at Lake Traverse several Swiss emigrants from the Red River settlement on their way to the American settlements on the Mississippi River. They were the forerunners of a stream of discouraged settlers who fled down the trail to an American haven. In the spring of 1826, in consequence of disastrous floods on the Red River, 243 settlers left the Red River colony in a body to make the long trek to Fort Snelling. In 1827 Lawrence Taliaferro, Indian agent for the upper Mississippi country, estimated that 330 refugees from the Red River country had reached Fort Snelling over

7. "Elk Hunting on the Prairies," in Spirit of the Times, 19: 87 (April 14, 1849).

the Red River trail since 1821.⁸

While the migration from the Red River settlement was getting under way, the trails themselves were becoming better known. In 1823 Major Stephen H. Long was ordered by the war department to make an expedition up the Minnesota River and down the Red River to the international boundary for the purpose of establishing the boundary from that point to Lake Superior. The official account of the journey, written by William H. Keating, who accompanied the expedition as mineralogist and geologist, gives us the first detailed description of the Red River route. From Fort Snelling, the main body of the expedition set out up the Minnesota River in canoes, with the remainder following on foot along the south bank of the river. Keating records that the difficulties of land travel at the beginning were great because of the marshy ground and heavy forests. At Traverse des Sioux, however, the entire expedition took to the land route because of the difficulty of paddling canoes in the shoal waters of the Minnesota. With the exception of the cut-off at the big bend of the Minnesota River, over the Traverse des Sioux, the party followed trails along the south bank to

8. Sibley, in Minnesota Historical Collections, 1: 383; Keating, Narrative, 2: 2; Folwell, Minnesota, 1: 217. For accounts of other journeys, see Mrs. Ann Adams, "Early Days at Red River Settlement, and Fort Snelling: Reminiscences, 1821-1829," in Minnesota Historical Collections, 6: 89-95 (St. Paul, 1894), and Augustus L. Chetlain, "The Red River Colony," in Harper's New Monthly Magazine, 58: 47-55 (December, 1878).

Big Stone Lake. They crossed to the east side of the Red River Valley between Lake Traverse and Big Stone Lake, and for the remainder of the way to Pembina followed a trail used by Pembina traders and hunters, which ran close to the east bank of the stream; never getting more than a few miles away from it. When they reached a point opposite Pembina, they crossed the Red River on a ferry. The party was joined at Lake Traverse by a half-breed guide and four Frenchmen with six carts, who were returning to the Red River settlement. That the Red River settlers were content to travel with the Long party would seem to indicate that the trail was familiar to them. ⁹

The number of travelers over the Red River route during the following two decades can only be guessed at, for few records exist. It gradually became an important thoroughfare, however, and life along its way must have been full of diversion. In 1833, for example, the traders and Indians along the route must have blinked in astonishment at the sight of a flock of sheep, which was being driven from Kentucky through the wilderness to the

9. Keating, Narrative, 1: 324-458, 2: 1-32. Long's manuscript diary of this trip, in three small volumes, is in the possession of the Minnesota Historical Society. The Italian adventurer, Giacomo C. Beltrami, accompanied the Long party to Pembina, and his account of the journey was published in French at New Orleans in 1824. In 1828 an English version was published at London entitled A Pilgrimage in Europe and America Leading to the Discovery of the Sources of the Mississippi and Bloody River, with a Description of the Whole Course of the Former, and of the Ohio.

Red River settlement. Robert Campbell, one of a party from the Red River country which performed the feat, left a journal of his trip, which described in considerable detail the route followed. Through the Minnesota country, the shepherds followed a route up the Red Cedar River almost to its source, and then turned toward the northwest, striking the Minnesota River near the big bend. With some difficulty, the extent of which can be imagined, they succeeded in getting their charges across the river, and a short distance farther on struck the trail along the north bank of the river. At Lake Traverse they crossed the Red River Valley, and followed along the west side of the valley to Pembina. 10

In 1835 George W. Featherstonhaugh, an English adventurer, obtained a commission as United States geologist, and, accompanied by Lieutenant William W. Mather of the United States army, made a journey of exploration through the Minnesota Valley. Featherstonhaugh's exploration tour, for the most part, was made by canoe; yet in the published account of the journey he throws some light upon the trade and trails in the Minnesota country. He records that the supply boats of the fur company traveled as far up the Minnesota as Patterson's Rapids, a full hundred miles above Traverse des Sioux. Here for the first

10. L. C. Sutherland, ed., "Driving Sheep from Kentucky to the Hudson's Bay Country," in Annals of Iowa, series 3, vol. 15, p. 243-253 (April, 1926).

time he mentions the "charette road of the Fur Company," over which, his guide informed him, the goods of the traders were borne in "carts or charettes with two wheels and one horse . . . across the prairies to their different trading posts." 11

The trail from the Red River did extend all the way to the mouth of the Minnesota, however, for during that summer the arrival at Fort Snelling of a train of carts bearing the goods of refugees from the Selkirk colony was chronicled. 12 John C. Frémont, who, as a captain in the regular army accompanied Joseph N. Nicollet on his exploring tour of western Minnesota during 1838, found that a practicable cart route led from Fort Snelling to Traverse des Sioux, for he traveled over it.

As our journey was to be over level and unbroken country the camp material was carried in one-horse carts, driven by Canadian voyageurs, the men usually employed by the Fur Company in their business through this region. . . . Our route lay up the Mini-sotah for about a hundred and fifteen miles, to a trading-post at the lower end of the Traverse des Sioux. . . . We travelled along the southern side of the river, passing on the way several Indian camps, and establishing at night the course of the river by astronomical observations. The Traverse des Sioux is a crossing-place about thirty

11. Featherstonhaugh, Canoe Voyage, 1: 328, 2: 13. The official report of Featherstonhaugh's expedition was published in 24 Congress, 1 session, Senate Executive Documents, no. 333 (serial 282) under the title Report of a Geological Reconnaissance Made in 1835, from the Seat of Government, by Way of Green Bay and the Wisconsin Territory, to the Coteau de Prairie, an Elevated Ridge Dividing the Missouri from the St. Peter's River.

12. Edward D. Neill, "Occurrences in and around Fort Snelling, from 1819 to 1840," in Minnesota Historical Collections, 2: 127 (St. Paul, 1889).

miles long, where the river makes a large rectangular bend, coming down from the northwest and turning abruptly to the northeast. . . . In this great elbow of the river is . . . Big Swan Lake, the summer resort of the Sisseton Sioux. Our way over the crossing lay between the lake and the river. At the end of the Traverse we returned to the right shore at the mouth of the . . . Cottonwood River. 13

At this point the Nicollet party left the Minnesota, and traveled up the valley of the Cottonwood River, and thence to the Pipestone quarries on the western border of present-day Minnesota. On the return trip, they turned northeastward and came to the Minnesota River at Lac qui Parle. No mention is made of the kind of roads or trails encountered on this portion of the journey, but it is more than probable that the carts of traders had traversed that portion of Minnesota long before the Nicollet party made the trip.¹⁴

Stephen Riggs, who came to Minnesota to establish a mission among the Sioux at Lac qui Parle in 1837, reported that the road from Mendota to Traverse des Sioux was not to his liking. He records that he traveled by boat from Mendota to Traverse des Sioux and over the traders' road along the north bank of the Minnesota River the remainder of the way. As late as 1840, according to Riggs, the traders' trail ended at the Traverse, for "it was then regarded as absolutely impossible to take any wheeled vehicle through by land to Fort Snelling." A few years

13. John C. Frémont, Memoirs of My Life, 1: 34 (Chicago and New York, 1887).

14. Frémont, Memoirs, 1: 36.

later a land route was opened which was passable, but "it was very difficult." 15

Martin McLeod came to the Minnesota country from the opposite direction. He enlisted as a member of General James Dickson's unhappy filibustering expedition, which appeared in the Red River country during the winter of 1836. In March, 1837, McLeod left Pembina for a hazardous late winter trip by dog team to Mendota, during which he almost lost his life when a prairie blizzard overtook his party. He followed a route which led along the west side of the Red River, far enough from it to permit crossing the tributary streams in their upper reaches, where they could be forded easily. At the foot of Lake Traverse he crossed to the east side and followed the road to the American Fur Company post run by Joseph R. Brown. From Lake Traverse he went by cart to Traverse des Sioux, following the road along the north bank of the Minnesota River. The remainder of the journey was made by canoe. He followed a well-known trail, for, almost fifteen years before his journey, a little party of refugees from the Red River colony had followed the same route in escaping from the hardships of the Red River frontier. 16

By the late thirties there evidently were several

15. Stephen R. Riggs, Mary and I: Forty Years with the Sioux, 49, 51, 52, 71, 82 (Chicago, 1880).

16. Nute, ed., in Minnesota History Bulletin, 4: 408-418; Adams, in Minnesota Historical Collections, 6: 89.

trails in existence up the Red River Valley. One followed close to the east bank of the river, while, on the west side, one ran close to the river, and another, far enough from it to avoid the marshes and deep water at the mouths of the tributary streams. In the Minnesota Valley there were at least two main trails, one on each side of the river at least for a portion of the way. It is probable that the trail along the north side was the more important.

It was in the decade of the forties that the Red River trade became a distinct factor in the business of the American Fur Company. In 1843 or 1844 Norman W. Kittson established a post for the company at Pembina, and from this date until well into the sixties the Red River trade and trails played an important part in the development of Minnesota. Prior to this time, the Red River trade was carried on by independent traders. But when Kittson's post was opened, the problems of supplying it with goods and of transporting to Mendota the furs and hides which he obtained in trade became pressing. He solved it as the early Red River settlers had done -- by using cart trains. The first summer after he had opened his post he sent a small cart train to Traverse des Sioux by the old route to Lake Traverse and down the Minnesota Valley. Although he failed to realize any profit on this first venture, he repeated it the next year, and thereafter the Red River cart trains

became an established part of the Minnesota fur trade. 17

When it became apparent that Kittson's venture was going to prove profitable, a competitor appeared in the field. In 1846 or 1847 Joseph Rolette, one-time employee of Kittson, began business as an independent trader. Rolette was not satisfied with the route to the Minnesota country by way of the Minnesota Valley, perhaps because he had difficulty in disposing of his furs in direct competition with the American Fur Company agent. At any rate, his cart trains blazed a new route to the lower country. They followed the old route along the west side of the Red River Valley to the junction of the Otter Tail and Bois des Sioux rivers. At this point they struck off in a southeasterly direction to the valley of the Sauk River, which they followed to its mouth. They forded the Mississippi River a short distance above Sauk Rapids, and followed along its east bank to St. Paul, then still but a struggling village, often referred to by the old-time settlers living there as "Pig's Eye Landing." Rolette was a successful trader, and in 1847 he is said to have sent a train of 120 carts to St. Paul. The trail which he opened came, in time, to be the main route of travel between the Red River country and Minnesota, although

17. Clarence W. Rife, "Norman W. Kittson, A Fur-Trader at Pembina," in Minnesota History, 6: 229, 245-248 (September, 1925); Pritchett, in Minnesota History Bulletin, 5: 413; J. Fletcher Williams, History of the City of Saint Paul, 48, 304 (Minnesota Historical Collections, vol. 4 -- St. Paul, 1876).

for a while the Kittson trains continued to follow the Minnesota Valley route. ¹⁸

During the forties other routes from the Red River country came into prominence. It is probable that at least some portions of them long had been traveled by the buffalo hunters of Pembina, as well as by traders. Corresponding to the trail which skirted the western edge of the Red River Valley where the tributary streams were shallow, was a trail on the east side. This trail ran southeastward from Pembina to about the site of present-day Thief River Falls. Here it turned southward and followed the sandy beaches of glacial Lake Agassiz to Elbow Lake, where it joined the Rolette trail. This route apparently was well traveled in the later years of the forties, for Major Samuel Woods, who made a reconnaissance of the Red River Valley in 1849 to select a site for a military post, planned to follow this route to Pembina. Unusually muddy roads on the route deterred him, however, and he went instead by way of the Rolette trail. ¹⁹

18. Williams, Saint Paul, 160; Pembina Settlement, 14 (31 Congress, 1 session, House Executive Documents, no. 51 -- serial 577); Pritchett, in Minnesota History Bulletin, 5: 413. An account of the arrival of a cart train, undoubtedly Rolette's, at St. Paul on July 10, 1847, is contained in the Wisconsin Herald of Lancaster for July 31, 1847. For a time after 1852, a route which led more directly to Traverse des Sioux from the upper Minnesota Valley was popular. It was not extensively used, however, because of the danger of Indian attacks. Weekly Minnesotian (St. Paul), July 24, 1852; Minnesota Democrat (St. Paul), August 2, 1854.

19. Pembina Settlement, 6, 8, 9.

Sometime during the decade the "woods trail" was opened by Red River travelers. This route to the Minnesota country followed the easternmost trail from Pembina to a point a short distance south of the crossing of the Wild Rice River. Then it turned eastward, skirted the north shores of Detroit and Otter Tail lakes, followed the valleys of the Leaf and Crow Wing rivers, and crossed the Mississippi River at Crow Wing. From that point it led southward along the east bank of the Mississippi and joined the Rolette trail at Sauk Rapids. William Hallet, an employee of the Hudson's Bay Company, is said to have opened this road in 1844, after an attack on a cart train by unfriendly Sioux Indians the preceding season. This route had one very obvious advantage for the Red River people, for many of them were related by blood or marriage to Indians of the Chippewa tribes, and this road passed almost entirely through Chippewa territory. Jonathan E. Fletcher, agent for the Chippewa Indians of the upper Mississippi, stated in 1849 that there was communication with Pembina over this route as early as 1847, and Henry M. Rice reported that in 1848 the half-breeds from Pembina brought a large quantity of pemmican to Crow Wing and that he purchased several thousand pounds of it. Travel along the route was likely to be difficult and expensive, for it led through much swampy and heavily wooded country. The cart brigades, therefore, preferred the prairie trails. Yet it was a favored route for winter.

travel, the woods along the way providing a friendly shelter from the bitter storms that raged on the prairies. 20

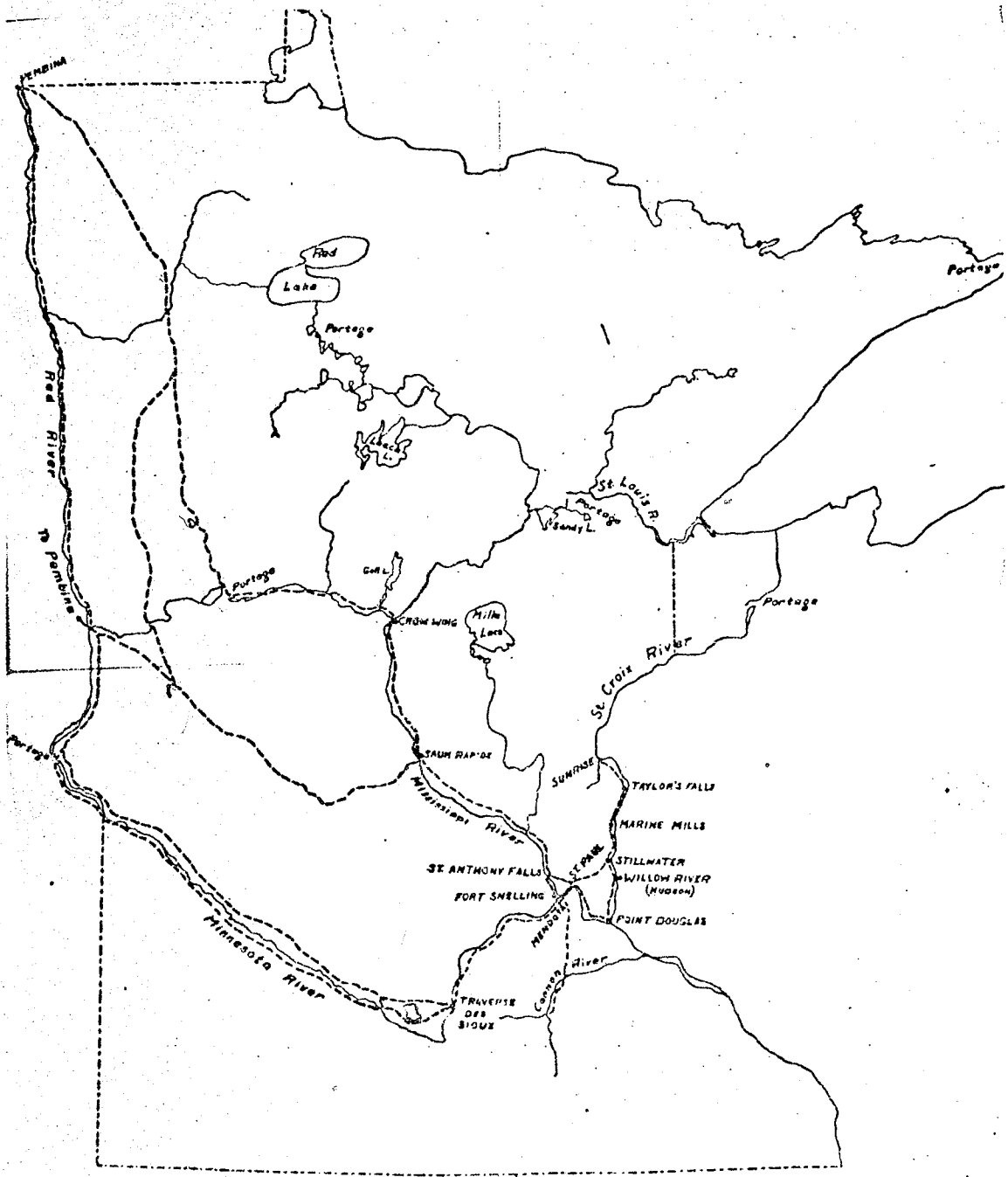
There was one other route to the Red River settlements from the Mendota post of the American Fur Company. It was a winter route, leading to Pembina from Crow Wing over the frozen surfaces of Gull, Leech, Cass, and Red lakes. During open seasons, if it was used at all, it served as a canoe route. Apparently it was used in the main for carrying mail. Throughout the greater portion of the territorial period, the only mail communication possible between the two centers of population was by private carrier, and only a limited number of mail deliveries were made each year. During the summer season, the mail was entrusted to any traveler who chanced to be passing through, although generally a leader of a cart train assumed charge of it. During the winter Kittson and Sibley maintained communication by special messenger, and in 1850 the traders at Pembina and the Hudson's Bay Company united to establish a private mail service. A government mail route, on a monthly basis, was established in 1852 from Pembina to Crow Wing, but it was discontinued after about a year. The long journey was made by dog team during the winter and took from

20. Minnesota Democrat, August 2, 1854; John C. Schultz, The Old Crow Wing Trail, 4, 12 (Historical and Scientific Society of Manitoba, Transactions, no. 45 -- Winnipeg, 1894).

twenty days to a month, depending upon the occurrence of winter storms. The dog sled was a toboggan-like conveyance -- "a single plank turned up at one end like a fiddlehead," was the way Lieutenant Zebulon M. Pike described it -- drawn by a team of from three to seven dogs, usually hitched tandem. Under favorable conditions, the traineau de glace, as the voyageurs called it, could travel from thirty to fifty miles in a day. Winter travelers usually went in pairs, partly for protection against the hazards of the trip, but also because the handling of a dog sled on unbroken trails required two men. One of them went ahead of the dogs to break the trail through the soft snow, and the other traveled behind to guide the sled. Snowshoes were an important part of their equipment. 21

The Red River trails were so variable that they scarcely could be called roads. Rather they were routes of travel. The traders' caravans rarely followed exact-

21. Minnesota Pioneer, March 6, 1850, January 29, September 9, 1852, December 1, 1853; Minnesota Democrat, February 11, 1851; Daily Minnesota Pioneer (St. Paul), December 13, 1854; Daily Pioneer and Democrat (St. Paul), May 13, 1856; Fred B. Sibley to Henry H. Sibley, February 26, 1853, in the Sibley Papers, in the possession of the Minnesota Historical Society. The perils of winter travel are graphically described in the pages of Martin McLeod's diary which record his journey from Pembina to Lake Traverse in March, 1837. See Nute, ed., in Minnesota History Bulletin, 4: 408-415. Selah G. Wright, a missionary at Red Lake, recorded that, on a winter trip from his mission to Pembina in 1843, his conveyance was an ox-drawn sled, which consisted of a plank fifteen feet long with one end turned up. Nute, in Minnesota History Bulletin, 5: 567.



MAIN ROUTES OF TRAVEL IN PRE-TERRITORIAL MINNESOTA

ly the same trail two years in succession. The trains went where grass was most abundant for pasturing the stock, where troublesome Indians were most easily avoided, and where the grades were easiest, the ground firmest, and the fording places shallowest. Since the oxen or horses had to find their forage along the route, traveling on the trails was restricted to the period between late spring and winter. The prairie grasses usually were tall enough to furnish forage in May, and the departure of the trains usually took place during that month. Ordinarily, they returned to the Pembina region during September, although trains occasionally made the trip later. Upon such occasions, however, they ran the risk of being overtaken by the sudden fall blizzards prevalent in prairie regions, or by the equally hazardous prairie fires, kindled by Indians, by careless travelers, or by lightning. The fires destroyed the feed for the cattle, and many a caravan endured incredible hardships as a consequence of encountering them.

Over this network of trading routes, the commerce of the frontier passed, and the symbol of that commerce was the unique, unwieldy Red River cart. How the carts originated, no one knows, but they were extensively used in the prairie regions of the Red River Valley almost from the time the first white men appeared there. They were typically the product of frontier resourcefulness and of frontier poverty. A wagon or cart was needed

on the far fringe of civilization, but it was impracticable to import it. The plainsman, therefore, devised a cart of his own. Two large wooden wheels, crudely but sturdily built, were mounted on a heavy wooden axle upon which a box-like framework was fastened. Because of the scarcity of iron on the frontier, none was used in the manufacture of the cart. Instead, pegs of hardwood and fastenings of rawhide held the cart together. Since it was made of the materials at hand, the cartman could repair it with the materials that he found along the line of march. When fully loaded with from four to eight hundred pounds of furs or other goods, it could be drawn by a single ox or pony hitched to wooden thills with a harness of rawhide, and one gaudily dressed half-breed often drove four or five of them. He drove the lead animal, and those behind were hitched to the carts ahead by their halter straps. It was an awkward appearing contrivance, but it was light and strong, and the huge dished wheels passed lightly over ground too soft to sustain smaller wheels. The wilderness cartman used no lubrication on his vehicle, save only an occasional application of buffalo tallow, and an unmusical screeching and wailing of a wooden hub fretting against a wooden axle was an inevitable accompaniment of each revolution of a cart wheel. Occasionally several hundred carts traveled in a train, and the noise of their passage could be heard



RED RIVER OXCARTS ON THE STREETS OF ST. PAUL IN 1859
[From a photograph in the possession of the
Minnesota Historical Society.]



for miles around. 22

The Red River trade was an important part of frontier economy. One historian has estimated that four-fifths of the entire annual shipment of furs and robes from St. Paul came from the Red River country. The number of carts employed in the trade increased until, during the height of the trade in 1858, as many as six hundred carts were reported to have made the annual excursion. The factors which led to the decline of the cart caravans consisted largely of improvements in the means of transportation. In 1859 a steamboat was placed in service on the Red River and a wagon road was opened to the river. The steamboat shortened the land journey to a little more than two hundred miles, and the road made it possible to transport furs to St. Paul by team more rapidly and at less expense than could be done by oxcart. The Red River cart traffic was dealt its mortal blow by the railroad. The St. Paul and Pacific Railroad was completed between St. Paul and St. Anthony during the summer of 1862. Each year thereafter, it was pushed a little farther toward the northwest, and each year more and more of the carts stopped at the terminus of the railroad. When the caravans set out

22. Pembina Settlement, 11, 14; Folwell, Minnesota, 1: 226; W. G. Fonseca, On the St. Paul Trail in the Sixties, 2-4 (Historical and Scientific Society of Manitoba, Transactions, no. 56 -- Winnipeg, 1900); Joseph J. Hargrave, Red River, 58-60 (Montreal, 1871); Minnesota Democrat, July 22, 1851.

in 1866, the railroad had been completed to St. Cloud, and for the next few years, the southern terminus of the cart trains which still continued in the trade was there. In 1872 the Northern Pacific Railroad was completed to Moorhead on the Red River, and thereafter the annual pilgrimages of the Red River cart caravans ceased. 23

While the carts of the Red River caravans were wearing trails into the tough prairie sod, other factors were at work to help build a foundation for a road system in the Minnesota region. One of these was the government of the United States, which, during the decade following the war with England, was seeking to extend and consolidate its authority on the western frontier. In 1818 the army chiefs were evolving a plan for frontier defense which contemplated the establishment of a military frontier far in advance of the frontier of settlement. To provide for the control of the Indians and to protect the interests of American fur trad-

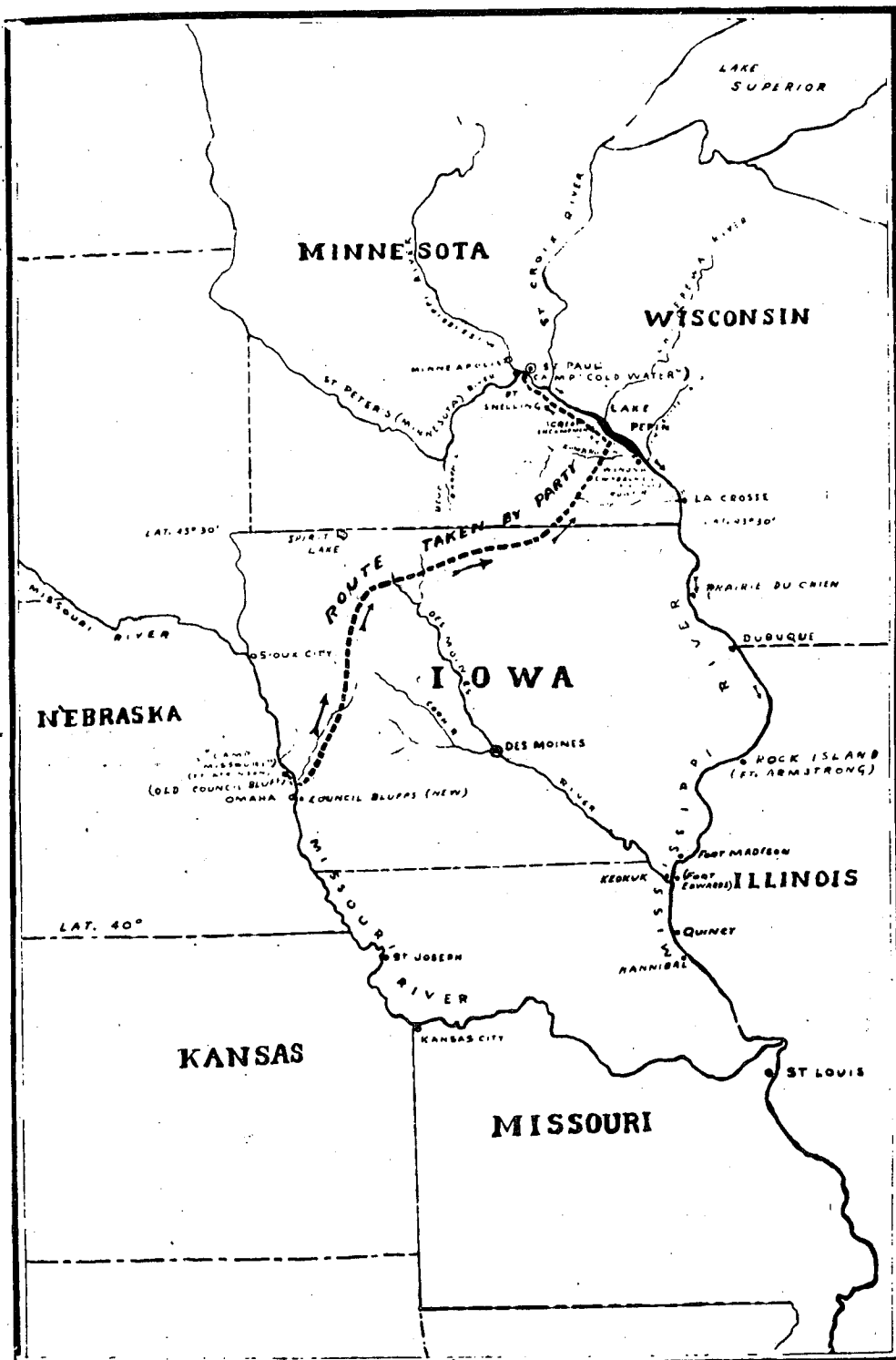
23. Williams, Saint Paul, 306; Russell Blakeley, "Opening of the Red River of the North to Commerce and Civilization," in Minnesota Historical Collections, 8: 45-66 (St. Paul, 1898). The Sauk Rapids New Era for August 9, 1860, recorded the arrival of a train of 30 wagons, belonging to the Burbank company, loaded with 430 bales of buffalo robes and 50 bales of furs, which they were carrying from the Red River to St. Paul for the Hudson's Bay Company. The entire shipment from the Hudson's Bay Company in 1860 amounted to more than 2,100 bales of furs and robes, and 130 teams were kept constantly on the road to haul them.

ers, the army planned to construct a series of frontier forts. One of these was to be located at the mouth of the Minnesota River, and another, either at the mouth of the Yellowstone River or at the Mandan villages on the Missouri River in present-day North Dakota. In 1819 Colonel Henry Leavenworth was sent with a detachment of troops to construct the post on the upper Mississippi River, and at the same time another expedition under the command of Colonel Henry Atkinson set off toward the mouth of the Yellowstone River. The Leavenworth command fulfilled its mission by establishing the post which later became Fort Snelling. The Yellowstone expedition found such obstacles in the way of navigating the Missouri River in the imperfect steamboats with which it was provided, that it got no farther than the Council Bluffs, not far from the site of present-day Omaha. There Atkinson established "Camp Missouri," which became a permanent post known as Fort Atkinson. These two frontier posts were to co-operate with one another in the enforcement of the law and preservation of order, but co-operation was dependent upon the establishment of a means of communication. The distance between them was almost 1,200 miles by water, but only 300 miles of wilderness separated them. It therefore was essential that a land route be opened. 24

24. American State Papers: Military Affairs, 2: 33; Valentine M. Porter, ed., "Journal of Stephen Watts Kearny,"

In the summer of 1820 a small detachment of soldiers under the command of Captain Matthew J. Magee was dispatched from the post on the Missouri River to explore a route for a road to Fort Snelling. Magee had orders to head directly to the new fort, but the country was unknown to the party, and their guides proved unreliable. They went up the valley of the Boyer River almost to its source in western Iowa, then turning to the northeast, they passed a few miles south of Spirit Lake. They had hoped to reach the Minnesota River, but by the time they came to the Des Moines River they were hopelessly lost. They turned more and more to the east, and from the Des Moines River to a point just beyond the Cedar River they traveled almost along what is today

in Missouri Historical Collections, 3: 8-12; Edgar B. Wesley, Guarding the Frontier, 144-158 (Minneapolis, 1935). Atkinson's instructions for opening the road toward Fort Snelling are contained in a letter from the secretary of war, John C. Calhoun, dated April 10, 1820; a letter from Calhoun to Leavenworth of the same date contains instructions to open the road toward Council Bluffs. Letter book copies of these letters are in the War Department Archives in Washington. The letters cited may be found in volume 11, pages 17 and 18, respectively, of the Secretary of War, Letter Books. Photostatic copies of many of the documents in the archives of the war and interior departments which are cited in this work are in the possession of the Minnesota Historical Society. That society also has copies of calendars of those archives compiled by Dr. Newton D. Mereness. For the sake of convenience, in citing a document in the war or interior department archives, the number assigned to the item in the calendar will be placed in parentheses after the citation. The calendar numbers for the above citations are 1048 and 1049, respectively.



Modern Map Showing Route Taken by the Exploring Party (1820) in Crossing from the Missouri to the Mississippi River.

ROUTE FOLLOWED BY CAPTAIN MCGEE
 [From Missouri Historical Collections, 3: 16.]



the boundary line between Iowa and Minnesota. After crossing the Cedar River they turned northward, crossed the Zumbro River, and reached the Mississippi at the village of the Sioux chief, Red Wing, on Lake Pepin. They were still fifty miles from their destination, but by following Indian trails along the banks of the Mississippi River they reached the fort without further difficulty. They were not satisfied with the route they had followed, and the report of Captain Stephen W. Kearny, who accompanied the expedition, indicated that it would not be practicable for other than small forces because of the scarcity of wood and water and the rugged character of the country, and he advised against the construction of a military road over it. ²⁵

The unfavorable report on the proposed road caused the project to lapse. The explorers returned to their post on the Missouri River by boat, and the probability of opening a land route seemed remote. It is possible that one or more of the members of the expedition returned by the land route or that they made a later exploration, for a map published in 1823 in Edwin James's account of the Long expedition clearly shows a route

25. Porter, ed., in Missouri Historical Collections, 3: 8-29, 99-131; Wesley, Guarding the Frontier, 158; brigade order to Magee to command an expedition to mark a route from Council Bluffs to Fort Snelling, June 23, 1820, in War Department Archives, Adjutant General's Office, Miscellaneous Collection, Letter Books, 1792-1826, vol. 24, p. 72 (Calendar, 522).

from the fort on the Missouri River to the outpost at the mouth of the Minnesota River, which is labeled "Lt. Talcotts route in 1820." Lieutenant Andrew Talcott, of the engineers corps, accompanied the Magee expedition, but the route indicated on the James map is not the one Magee followed. In 1820 Lewis Cass recommended that Talcott would be a suitable person to conduct an expedition up the Minnesota River, and, although no report of it has been found, such an exploration may have been made. At any rate, the map in the James account shows a route closely following the Minnesota River from its mouth to the point where the river turns toward the northwest, and thence leading almost directly to the fort on the Missouri River. 26

For a decade and a half no further effort was made to open a land route between the Missouri and upper Mississippi country. During the middle thirties, however, the question of frontier defense was again raised, and in 1836 Congress appropriated \$100,000 for the construction of a military road along the

26. Porter, ed., in Missouri Historical Collections, 3: 27. James's Account of an Expedition from Pittsburgh to the Rocky Mountains, Performed in the Years 1819, 1820 . . . under the Command of Maj. S. H. Long, is reprinted in volumes 14-17 of Reuben G. Thwaites, ed., Early Western Travels, 1748-1846 (Cleveland, 1905). The map referred to is reproduced on page 30 of volume 14. No record has been found to indicate that Leavenworth dispatched a party from Fort Snelling to open a road to Council Bluffs in compliance with the instructions of April 10, 1820, from Calhoun. See ante, p. 27n. It may be that Talcott was selected for this duty upon the arrival of the Magee expedition.

whole western frontier from the Red River in Arkansas to the upper Mississippi River between the Des Moines and Minnesota rivers, connecting all the outlying frontier posts. Construction on it was to be held to a minimum, and the soldiers garrisoned on the frontier were to do only as much work as was needed to make it passable. Explorations for the new route were begun immediately. The road was divided into three sections, the northernmost of which extended from Fort Snelling to Fort Leavenworth. In July, 1838, Captain Nathan Boone of Fort Leavenworth arrived at Fort Snelling having completed his reconnaissance of the northern division. By the end of 1839 construction on the middle and southern sections was well under way, but on the recommendation of the quartermaster general of the army no work was done on the northern division, inasmuch as the whole region was "represented as an open prairie, that may be traversed in all directions without difficulty." To preserve the line of communication, however, he recommended that intermediate army posts be established near the mouth of the Big Sioux River on the Missouri River, and at some place on the Minnesota River. 27

27. Statutes at Large, 5: 67; report of the quartermaster general, November 29, 1839, in 26 Congress, 1 session, Senate Executive Documents, no. 1, p. 112-115 (serial 354). The exact route followed by Boone is not known, but Captain James Allen, who in the summer of 1844 made an expedition from Fort Des Moines through the Indian country of southern Minnesota and eastern South Dakota, discovered a stake in the prairie sod

These explorations were not destined to result in the construction of roads, but they were forerunners of an extensive program of military roads inaugurated in Minnesota after the organization of the territory. They added to the knowledge of the topography of Minnesota, and eventually a military road was constructed along the general route they covered, while the creation of Fort Ridgely on the Minnesota River in 1853 was an echo of the recommendation of the war department in 1839. In other ways, too, the military assisted in outlining the road system of Minnesota. The expeditions of Major Long and Major Woods delineated the great arteries of travel to the Red River country. The soldiers at Fort Snelling constructed roads in the vicinity of the fort -- to the Falls of St. Anthony and to Lake Calhoun -- and they were instrumental in establishing the ferry across the Minnesota River at Mendota. 28

near the Des Moines River in the vicinity of present-day Windom and explains that he "thought it was probably on the route of Captain Boone . . . from Fort Leavenworth to Fort Snelling . . . though I could see no other trace of their march." Jacob Van der Zee, ed., "Captain James Allen's Dragoon Expedition from Fort Des Moines, Territory of Iowa, in 1844," in Iowa Journal of History and Politics, 11: 92 (January, 1913). The route followed by Boone, therefore, probably skirted the north shore of Heron Lake, and very likely reached the Minnesota River at the great bend near Mankato.

28. Marcus L. Hansen, Old Fort Snelling, 1819-1858, 73, 81 (Iowa City, 1918); E. S. Seymour, Sketches of Minnesota, the New England of the West, 117-119 (New York, 1850).

When Fort Snelling was established in 1819, it was far beyond the fringes of civilization. Within a score of years, however, the process of settlement brought people to its very walls, and, where Indians had once roved at will, the beginnings of towns and cities were to be found. Up to 1837 the infant settlements in the shadow of Fort Snelling were located on Indian lands. The negotiation of treaties during the summer of that year with the Sioux and Chippewa Indians resulted in the relinquishment of the Indian title to the portion of the Minnesota country east of the Mississippi River and south of a line drawn due east from the mouth of the Crow Wing River. One of the strongest forces that had worked for the negotiation of the treaties was the lumbering interest, for the valley of the St. Croix River possessed forests of white pine unequalled in the Northwest, and lumbermen of Wisconsin and Michigan were casting covetous eyes that way. Indeed, some of them had not waited until the treaties were negotiated to cut a few trees. In 1837 a town was laid out at the falls of the St. Croix River, and two years later the first sawmill was built at Marine. On the site of present-day Stillwater, Joseph R. Brown, one-time drummer boy at Fort Snelling, Indian trader, and lumberman, laid out a townsite which he called Dakotah. Lumber camps appeared in the choice forests of white pine, and the hum of the sawmill testified to

a rapidly growing industry. Within a dozen years of the signing of the treaties, lumbermen had gained a firm foothold in the Minnesota country, and a dotting of cleared spaces in the wilderness between Stillwater and the landing, which was dignified by the name St. Paul, presaged the advance of an agricultural frontier. 29

The lumbermen were probably the first road builders in the timberlands of the St. Croix Valley. Not a great deal is known about the roads they built, for they were but temporary trails. When the marketable timber in a locality was exhausted, the lumber camp was removed, and the roads were permitted to grow up to wilderness again. The logs were cut in the interior, hauled over rough trails to the bank of a neighboring stream, and, when the spring thaw came, were floated down to the great mills at Stillwater, St. Anthony Falls, and Marine Mills. As the streams in the spring served as highways for carrying the cut of the season to the mills, so, in the winter, they served as the highways over which the infrequent trips were made from lumber camps to mills or towns. The roads of the lumbermen were not elaborate, for the heavy snowfalls of Minnesota

29. Folwell, Minnesota, 1: 213-230. Agricultural settlement began in Woodbury and Newport townships of Washington County in 1845 and 1847, respectively, while emigrants from the Red River country settled in Afton and Lakeland townships between 1837 and 1842. George E. Warner and Charles M. Foote, eds., History of Washington County and the St. Croix Valley, 381, 386, 400, 413 (Minneapolis, 1881).

winters leveled off the uneven places, and the process of construction usually consisted merely of the removal of brush and the cutting of stumps even with the ground. Sometimes these logging trails became the basis for roads of another generation, for, even when abandoned, traces of them remained for a decade or more. ³⁰

The growth of settlement in the area west of the St. Croix River necessitated the provision of a more adequate system of government. In 1837, therefore, the coded area was added to Crawford County, which comprised most of the northwestern portion of the territory of Wisconsin. Two years later, Joseph R. Brown was elected delegate from Crawford County to the Wisconsin territorial legislature. He was responsible for the passage of an act, early in 1840, that divided Crawford County, and created from the northern portion a new county called St. Croix. Most of the settlers in the new county were living in the St. Croix Valley, and, when they voted on a location for the county seat, they chose Brown's mythical city of Dakotah. Thus, the center for the government of St. Croix County was placed on future

30. Daniel Stanchfield, "History of Pioneer Lumbering on the Upper Mississippi and Its Tributaries," in Minnesota Historical Collections, 9: 325-362 (St. Paul, 1901). A brief description of logging roads may be found on page 346 of this article. An illustration of the adaptation of an old logging road to the needs of a later generation may be found in the opening of a road from Superior to Taylor's Falls in 1854, a portion of which followed a logging road. See post, p.109.

Minnesota soil, and, almost ten years before the organization of Minnesota Territory, the voters were gaining experience in handling their local affairs under a county government. 31

In the Wisconsin plan of government county commissioners had the power to make arrangements for opening new roads upon petition of at least ten householders in the township in which the proposed road was to be located, six of whom were required to live in the immediate vicinity of the road. Three disinterested electors of the county, chosen by the commissioners, were to select the route for the proposed road. Upon the completion of their task, they were required to deposit a copy of their proceedings with the county commissioners, who, if the report favored the opening of the road, assumed the responsibility for its completion. To keep roads in repair, the office of road supervisor was created. This officer, who was appointed by the county commissioners, had to see that all male citizens of his district between the ages of 21 and 50 worked on the roads for two days in each year. To him also was entrusted the task of collecting the road tax, imposed by the county commissioners, which was not to exceed one-half of one per cent of the value of the real estate assessed. The tax was payable either in money

31. Folwell, Minnesota, 1: 231-234.

or in labor on the roads at the rate of two dollars per day. If the county commissioners decided that bridges were needed, it was the duty of the supervisor to build them. Money for their construction was to be supplied by the commissioners from the general road fund.³²

At the first meeting of the commissioners of St. Croix County in October, 1840, one road supervisor was appointed. The following year, however, three such officials were named, probably because the territorial legislature of Wisconsin in 1841 passed acts authorizing the opening of three roads, from Marine Mills on the St. Croix to Gray Cloud Island on the Mississippi River, from the falls of the St. Croix River to Marine Mills, and from Prescott's Ferry at the mouth of the St. Croix River to Gray Cloud Island. For most of the remaining years before Wisconsin became a state, the records of the county commissioners are available, and they show that road supervisors were appointed every year except in 1844 and 1846. Apparently there was little activity in road construction, however, for, aside from opening the roads authorized by the Wisconsin legislature in 1841, the only other work recorded was that of locating a road from Stillwater to Marine Mills in October, 1847. There must also have been a road of some kind leading to the mouth of the St. Croix River, for the county commissioners in 1840 authorized

32. Wisconsin Territory, Statutes, 1839, p. 107-114.

Philander Prescott to operate a ferry there, and in the spring of 1844, the half-starved settlers at the falls of the St. Croix cut a road "fifty miles to Fort Snelling." Pioneer accounts record that there was also a road from St. Paul to Stillwater which was traveled at least as early as 1847. A visitor to Minnesota early in 1849 described these roads and also a much-traveled wagon road leading from Taylor's Falls to the pineries on Sunrise River. The roads of pre-territorial Minnesota were, for the most part, natural trails; that is, practically the only work done on them was to remove the timber and brush. They resembled the traders' trails which crossed the western prairies in that they varied from year to year as the old routes became rutted or full of mudholes, or as new ones were discovered which were shorter or smoother. 33

By 1849 Minnesota already had a considerable framework of roads upon which to build. The traders of the Indian country left a network of trails which led to the far western portions of the territory. The military guardians of the frontier left a projected, although

33. Moses M. Strong, History of the Territory of Wisconsin, from 1836 to 1848, 343, 374, 375 (Madison, 1885); Warner and Foote, eds., Washington County, 193, 322, 328, 330; Stanchfield, in Minnesota Historical Collections, 9: 335; Seymour, Sketches of Minnesota, 177-197; Florence A. Hartwig, "Earliest Political Activity and Organization in the Upper Mississippi Country," 51, 53, 60. The latter is a master's thesis, in manuscript form, which was submitted at the University of Minnesota in 1926.

uncompleted, system of military roads and an increased knowledge of the Minnesota country. Minnesota also inherited a few struggling settlements and rambling roads in the St. Croix delta, which provided the nucleus for future growth. More important than all these in the development of the Minnesota road system was the heritage received from the territory of Wisconsin in the form of a body of laws, providing the basis for the government of the territory of Minnesota.

II. THE FOUNDATION OF THE FRONTIER MILITARY ROAD SYSTEM

When Wisconsin was admitted to statehood, that portion of the original territory of Wisconsin lying west of the St. Croix River was excluded from the new state and no provision was made for the continuation of territorial law. Some people thought that there was no longer any authority to enforce laws, if indeed there were any to enforce. The country lying north of Iowa and west of the Mississippi River was in a similar position, for it had been separated from Iowa when that territory was admitted as a state. But there the neglect was less harmful, for the region had never been opened to white settlement, and, aside from a few traders who were pretty much their own law, few white men inhabited it. The Minnesota country east of the Mississippi had been open to white settlement for a decade, and its people had brought to it many of the attributes of settled regions. It would have been difficult to relegate that white man's land to the uncertain status of Indian country. ¹

As the summer of 1848 waned and no Congressional action was taken to provide a territorial government for the Minnesota country, the inhabitants of the re-

1. Folwell, Minnesota, 1: 236, 488.

gion took matters into their own hands. In August a group of citizens met at Stillwater and named one of their number to present their case to Congress. Henry Hastings Sibley was chosen for this important task, and the choice was a fortunate one, for, although Sibley's claim to the seat vacated by the delegate from Wisconsin when that territory became a state was of doubtful legality, the surprisingly suave fur trader from the West so won the members of Congress that they overlooked the irregularity of his election and accorded him the right to occupy the seat. As the representative from the territory of Wisconsin, he was in a position to work for the things that the Minnesota country needed. ²

There is reason to believe that the need for an adequate system of communication was an important factor in the agitation for the creation of Minnesota Territory. The country was new and sparsely settled, and its meager beginning of a road system was far less than even so thinly populated a country needed. But there were too few people to perform the physical labor of building the roads. Urging the necessity for a road between St. Paul and Stillwater, Henry L. Moss of the latter place wrote to Sibley: "The interests of the country require that something should be done. And at the present time there is not sufficient number of

2. Folwell, Minnesota, 1: 241-246, 365-367.

settlers upon the route to effect anything by their own labor." But there was a way in which roads might be obtained, no matter how poor and sparsely settled the country was. The federal government might be persuaded, under the guise of frontier defense against the Indians, to provide the foundation for a system of roads years before the people of the territory themselves could build them. Next to obtaining a territorial form of government for the Minnesota country, Sibley's most important task was that of getting Congress to appropriate money to build roads. ³

Sibley returned to Minnesota in the spring of 1849 with his principal mission accomplished, and, while he had not obtained the hoped-for Congressional appropriations for military roads, he had laid the foundations for future action. He had succeeded in getting a bill introduced in Congress asking for an appropriation of \$12,000 for the construction of a road from the St. Louis River to St. Paul and Point Douglas by way of Marine Mills and Stillwater. Congress had not had time to consider the bill during the session of 1848, but Sibley anticipated no difficulty in obtaining that body's

3. Moss to Sibley, November 20, 1848. In this letter and in one from Orange Walker to Sibley, dated November 7, 1848, petitions for roads, which were being prepared by residents of Stillwater, are referred to. The letters are in the Sibley Papers.

approval when next it met. ⁴

He had reason to be optimistic, for Congressional appropriations for road construction had ample precedent. Since the early nineteenth century, when Congress first appropriated money to build the old National Road, every territory and many of the western states had received grants of money or lands to aid in building roads and canals. In Wisconsin and Iowa, nearest neighbors to the Minnesota country, the federal government had spent money liberally for the construction of military roads for the protection of the frontier. In the background of Minnesota history, also, were two expeditions sent out expressly to make explorations for contemplated military roads through the southern portion of the region. The road for which Sibley asked was one that the territory of Wisconsin had endeavored to obtain for half a decade. Its route was slightly different, but the plan for a military road from the Mississippi River to Lake Superior was the same. ⁵

4. Congressional Globe, 30 Congress, 2 session, 409, 599, 615; address of Sibley to the people of Minnesota Territory. The latter is an undated, printed document in the Sibley Papers.

5. See ante, p. 25-30; Archer B. Hulbert, "The Old National Road -- The Historic Highway of America," in Ohio Archaeological and Historical Society, Publications, 9: 405-519 (Columbus, 1901). A list of appropriations by Congress for constructing and repairing the road may be found on pages 511-517. The idea of constructing military roads apparently had its inception in 1819. See Jeremiah S. Young, A Political and Constitutional Study of the Cumberland Road, 31 (Chicago, 1904). Appropriations for military roads in territorial Wisconsin

During the summer that followed the organization of the territory, the Minnesota country hummed with activity. Real estate values began a spectacular rise in St. Paul, and settlers -- farmers, merchants, and professional men -- thronged in. Those forerunners to a mighty wave of immigration were dreamers and planners, speculators on the fortunes of a new country. They were not content to let things drift on the winds of chance; they wanted immediate results. They were dissatisfied that only the small portion of the territory east of the Mississippi River was open to settlement, for they had visions of vast fortunes in real estate and commerce built upon the foundations of a thriving population not only there but in the "Suland" to the west of the Mississippi

sin, according to Sibley, totaled \$104,000; those for territorial Iowa, \$65,500. Congressional Globe, 31 Congress, 1 session, 1074; Statutes at Large, 5: 303, 352, 670, 778. The route suggested in memorials to Congress by the Wisconsin legislature extended from Prairie du Chien to La Pointe on Lake Superior, and one memorial asked for a road from St. Croix Falls to La Pointe. It was claimed that such a road would bring the rich copper regions of Lake Superior into close contact with the civilization of the Mississippi River and would give the citizens of La Pointe County the "protection and benefits of the courts of justice agreeable to our free institutions." Wisconsin Argus (Madison), February 11, April 15, 1845, January 20, February 10, 1846; Strong, Territory of Wisconsin, 453, 477, 507, 543. The Argus for January 12, 1847, argued that a road up the St. Croix Valley to Lake Superior would open an immense market in the copper mining region for the agricultural produce of the Mississippi Valley. It claimed that the distance from St. Croix Falls to Fond du Lac was only about a hundred miles and that it was only a few miles farther to La Pointe. Furthermore, the paper asserted, engineers had reported that the route was feasible and that the cost of construction would be small.

as well. They demanded that the Indian title to that land be quieted and that facilities for transportation throughout the territory be provided. ⁶

Chief among their prophets stood James Madison Goodhue, fiery editor of Minnesota's first newspaper, the Minnesota Pioneer. He arrived in St. Paul close on the heels of the messengers who brought the news of the organization of the territory. On April 28, 1849, he issued the first number of his newspaper, and from that time until his death in 1852 he was an outstanding exponent of expansion and growth and an ardent advocate of the necessity for improving the means of transportation and communication in Minnesota. He foresaw the possibilities for St. Paul as a distributing point for the Northwest. Its position at the head of navigation on the Mississippi River, he declared, made it the natural center from which goods would be distributed by land over a wide area -- to the Selkirk settlements, to the Indian country extending to the Rocky Mountains, and to the Lake Superior country and the basin of the Great Lakes. The possibilities that he envisioned were national in scope and importance, but their fulfillment, in part, depended upon the completion of a network of roads such as that for which Sibley in the fall of 1849 asked Congress to appropriate funds. ⁷

6. Folwell, Minnesota, 1: 266-270.

7. Minnesota Pioneer, April 28, May 5, 1849.

Just what plans for achieving the desired results were discussed during the summer months of 1849 may never be known, for much of the debate undoubtedly took place in private conversations. In August the first territorial election was held, at which representatives to the territorial legislature and a delegate to Congress were elected. It is noteworthy that popular regard for Sibley was so great that he was unanimously elected to serve as delegate to Congress from Minnesota Territory. The legislature met for its first session on September 3, and Governor Alexander Ramsey, in his address to that body on the following day, outlined what he considered were the essential needs of the territory. Among other things he suggested that "much good . . . could be done by the general government, in opening a great military road from Fort Snelling to the Missouri, and marching a respectable military force over it at least once a year." This, he felt, would curb the menace from the prairie Indians, and, if the "Suland" were purchased, would go far toward ending it. A good wagon road from the St. Croix to Lake Superior, he stated, "would open the mineral regions on the shores of that lake to the farm produce of our Territory. . . . It would, moreover, give convenient access to the extensive pineries on that river; and thus enable the General Government, at an early period, to realize something out of her public lands in that quarter. . . . On the Mississippi, a good

road is needed; and one could be constructed at small expense, from St. Paul . . . to Crow Wing . . . and when completed, it would afford to the Government a good military road from Fort Snelling to Fort Gaines." The governor recognized also that a road to Crow Wing would facilitate the Red River trade, the cultivation of which he thought distinctly advisable.⁸

The legislature took up its work with enthusiasm, drafting a series of memorials to Congress which surpassed the recommendations of Governor Ramsey. In addition to the three roads which he thought were important to the territory, the two houses asked that a road be constructed from the Mississippi River at the mouth of the Swan River to the Winnebago agency at Long Prairie on the grounds that the agency was unable to procure needed supplies. A memorial for a road on the west side of the Mississippi River from Mendota to the Iowa line was also adopted, for such a road would "be highly beneficial to the Government of the United States, by enabling it much more rapidly to dispose of the lands on the west side of the Mississippi river convenient to the line of said road, and which will in all probability be soon in market." The pioneers even then were anticipating the negotiation of a treaty for the extinction

8. Folwell, Minnesota, 1: 246-255; Council Journal, 1849, p. 13, 15, 16. Fort Gaines was renamed Fort Ripley in 1850. Upham, Geographic Names, 355.

of the Sioux title to the lands west of the Mississippi. ⁹

To what extent the influence of Sibley had determined the recommendations of Governor Ramsey to the legislature is not known. Ramsey, a newcomer in the region, could hardly have made such specific recommendations without advice from someone, in spite of his extensive travels in Minnesota during the summer of 1849, and Sibley, with his experience of a decade and a half in the fur trade, was well equipped to guide him. There were men in the legislature, too, who knew the communication needs of the territory, not from hearsay, but from actual experience. The influence of David Olmsted, president of the Council, and since 1848 a trader at Long Prairie, was important. Martin McLeod, for over a decade a trader in the Minnesota Valley, reported to the Council on the memorial for a road from Fort Snelling to the mouth of the Big Sioux River. The memorial for a road to Fort Ripley and the Winnebago agency was laid before the Council by William Sturgis, a trader at Little Falls; and that for a road from Point Douglas to Lake Superior, by David B. Loomis, a lumberman from Stillwater. In the House Alexis Bailly, long a figure of prominence in the Minnesota fur trade, played an important part in drawing up the memorial for a road from Mendota to the Iowa line. ¹⁰

9. Council Journal, 1849, p. 28; House Journal, 1849, p. 31; Laws, 1849, p. 165, 169, 172, 173. Four of thirteen memorials adopted at this session relate to roads.

10. Warren Upham and Mrs. Rose B. Dunlap, Minnesota Biographies, 1655-1912, 28, 448, 476, 565, 756 (Minnesota Historical Collections, vol. 14 -- St. Paul, 1912).

Sibley returned to Washington armed with the memorials to Congress and the knowledge that the only way a badly needed road system could be obtained quickly was by liberal governmental expenditure. He was spurred on by anxious letters from home. "I trust you will do your best in getting an appropriation for our road to Lake Superior," wrote one St. Croix Valley supplicant. "If not assisted by Gov[ernment] we have a hard task before us if left to individual enterprise and until there is a road opened the country north of us will settle verry [sic] slowly." Another constituent wrote, "The difficulty in getting access to the interior is now a perfect barrier." David Olmsted entreated, "Cannot an appropriation for the improvement of the road between this place [Long Prairie] and the Mississippi be procured and Expended at an early date? It is imperatively needed each by the Government, the Indians, the traders, and the citizens generally." 11

Sibley's bill to provide for the construction of roads in the territory was introduced in the House on February 4, 1850. The committee on roads, to whom the bill was referred, reported favorably on it in the following words:

11. William Holcombe to Sibley, January 15, March 12, 1850; J. O. Henning to Sibley, March 26, 1850; David Olmsted to Sibley, March 25, 1850. Orange Walker suggested that an appropriation of land be obtained for constructing the road to Lake Superior. Walker to Sibley, December 10, 1849. These letters are in the Sibley Papers.

That same fostering care which has always been extended to the new Territories of the country may, in the opinion of the committee, well be manifested towards Minnesota, in opening and improving such thoroughfares as may be necessary for her protection, and useful in advancing her settlements. Such a policy will not only conduce to the general interest and welfare of the settlers, but will increase the value and sale of the public lands to the benefit of the government. 12

When the bill came up for consideration in the House, however, it was opposed by Representative George W. Jones of Tennessee on the grounds that the people of the territory could make their own roads as well as could those living in the states. Sibley countered this assertion by appealing to precedent.

It has been the uniform policy of Congress to aid the organized territories, by appropriations of money for the construction of roads. The Government being the only great landholder, it is in accordance with its own pecuniary interests, as well as just to Minnesota, that proper means of access should be afforded to immigrants who wish to settle upon the public lands. The roads asked for are to be the great thoroughfares of the country, some of them to lead to your military posts and your Indian agencies, and the Government, by constructing them, will, in a very few years, save more than the sums asked for, by the consequent diminution of the cost of transporting military stores and supplies, and goods and provisions for annuities under treaty stipulations.

Representative Richard Parker of Virginia moved to omit the sum requested for the Mendota-Big Sioux road, and stated flatly that he would not vote for any military roads unless the bills for them were accompanied by

12. Congressional Globe, 31 Congress, 1 session, 230, 276, 511; report of the House committee on roads and canals, March 13, 1850, in 31 Congress, 1 session, House Committee Reports, no. 172 (serial 583).

recommendations and estimates from military officials. The opposition of Jones and Parker was overcome, but an amendment proposed by Representative Orin Fowler of Massachusetts that the governor of the territory be required to report annually to Congress on expenditures of money appropriated was adopted, and in that form the bill was passed by the House. Contrary to the expectations of both Sibley and Ramsey, the bill had smoother sailing in the Senate. There Stephen A. Douglas, ever Minnesota's friend, and Augustus C. Dodge of Iowa, quieted the objections that were raised because the war department had not asked for the roads. The bill passed by a vote of 28 to 7, and Minnesota's road-building program was ready to be put into operation. 13

13. Congressional Globe, 31 Congress, 1 session, 1074, 1075, 1089, 1112, 1348, 1356; Sibley to Ramsey, May 27, 30, 1850, in the Ramsey Papers, in the possession of the Minnesota Historical Society; Ramsey to Sibley, June 3, 1850, in Sibley Papers. In a sense there had been recommendations for roads in Minnesota by the war department. Captain John Pope, after his return from Minnesota in 1849, recommended to the secretary of war that three wagon roads be constructed, one to connect the Red River and Mississippi River valleys, one from St. Paul to the Missouri River, and one from St. Paul to Crow Wing and eastward to Lake Superior. Pope's report is in 31 Congress, 1 session, Senate Executive Documents, no. 42, p. 1-42 (serial 558). See also a letter from Pope to Henry M. Rice, dated September 26, 1850, which was published in the Minnesota Democrat on December 10, 1850. Pope evidently hoped to obtain the appointment to direct the construction of Minnesota roads. Pope to J. J. Abert, August 16, September 3, 1850, in War Department Archives, Topographical Engineers, Letters Received (Calendar, 2757, 2758). Photostatic copies of these letters are in the possession of the Minnesota Historical Society.

The measure became effective on July 18, 1850. It appropriated \$15,000 for the construction of a road from Point Douglas on the Mississippi, via Cottage Grove, Stillwater, Marine Mills, and the falls of the St. Croix, to the falls of the St. Louis River. For the construction of a road from Point Douglas, via Cottage Grove, Red Rock, St. Paul, and the Falls of St. Anthony, to Fort Ripley, \$10,000 was set aside, and the sum of \$5,000 was made available for a road "from the mouth of Swan River, or the most available point between it and the Sauk Rapids, to the Winnebago agency at Long Prairie." Sibley did not obtain money for a road from the Iowa line to Mendota along the west bank of the river, but he did get an appropriation of \$5,000 for a road from Wabasha to Mendota. Also, the sum of \$5,000 was set aside for the survey of a road from Mendota to the mouth of the Big Sioux River, but no provision was made for its construction. The act stipulated that the roads were to be built by contracts let under the direction of the secretary of war. Thus, the foundations for the military road system of Minnesota were laid. The roads were patterned wheel-like, with St. Paul as the hub. One spoke reached northward to the Great Lakes; another, northwestward toward the Red River settlements; one extended to the southwest toward the Missouri; and another to the southeast -- the first step in the formation of a connecting link with Iowa. The sums appropriated were

not regarded as sufficient to insure completion of the roads, but Sibley, and others, felt that they would "go far towards opening the country to immigrants, and will prove of incalculable benefit, even on that score alone." Minnesota confidently relied on Congressional generosity to obtain future grants to complete them. ¹⁴

The appropriations, totaling \$40,000, were available immediately, and were intended to be used during the current fiscal year. The secretary of war entrusted the construction to the road builders of the army, the topographical engineers, and Colonel J. J. Abert, their chief, assumed direct charge. He was unable to place an army engineer in the field at once, so, after considerable delay, he employed John S. Potter, a civilian engineer. Since no detailed recommendations for the routes of the roads had been made, Potter was instructed first to make preliminary surveys. Unfortunately, he was ordered to begin work on the road from Mendota to Wabasha, for which, since it passed through Indian country where there were few white inhabitants, there was no pressing need. The people of the St. Croix region, however, wished the road to Lake Superior to be built first, and they appealed to Sibley, who wrote to Abert in protest. The legislature of Minnesota also complained,

14. Statutes at Large, 9: 439; address of Sibley to the people of Minnesota, July 29, 1850, a printed document in the Sibley Papers.

and asked that more men be employed on Minnesota roads. In March, 1851, therefore, Abert requested Potter to give his immediate attention to the road from Point Douglas to Lake Superior. By that time, however, Potter had completed his survey of the Wabasha-Mendota road, and had begun a reconnaissance of the road from the Swan River to Long Prairie. In April, however, Lieutenant James H. Simpson of the topographical corps came to Minnesota to take charge of the work, and he soothed the ruffled tempers by concentrating his efforts on the roads from Point Douglas to Lake Superior and Fort Ripley. 15

The army officers estimated that a sum of \$70,000 was needed to complete the roads in Minnesota, and they asked for an additional \$5,000 for a survey of the Mendota-Big Sioux road. It therefore devolved upon Sibley to seek further appropriations that winter. In February,

15. Abert to Conrad, September 2, 1850, in War Department Archives, Chief of Topographical Engineers to the Secretary of War, Letter Books, 4: 207-210 (Calendar, 126); Abert to Potter, October 5, 1850, in War Department Archives, Topographical Engineers, Letter Books, 13: 47-49 (Calendar, 2227). Photostatic copies of these letters are in the possession of the Minnesota Historical Society. See also Holcombe to Sibley, January 8, 1851, in Sibley Papers; address of Sibley to his constituents, March 4, 1851, a printed document, in Sibley Papers; Abert to Sibley, March 11, 1851, enclosing a copy of a letter from Abert to Potter, March 7, 1851, in Sibley Papers; Minnesota Pioneer, November 14, 1850, March 6, 1851; Minnesota Democrat, December 24, 1850, April 8, 22, May 13, 1851; report of Abert to the secretary of war, November 14, 1850, in 31 Congress, 2 session, Senate Executive Documents, no. 1, part 2, p. 390-393 (serial 587); Council Journal, 1851, p. 51; House Journal, 1851, p. 64, 66. The field notes of Potter and Simpson are in the Alfred J. Hill Papers, in the possession of the Minnesota Historical Society.

1851, he wrote to Ramsey in a jubilant vein that the House committee on ways and means had approved this huge appropriation and had added it to the army appropriations bill. When the bill came up for consideration, however, the House, irked by the growing appropriations asked for under this heading, began to slash away the items, and one after another the sums for roads in Minnesota were dropped. Sibley confessed that he had not expected any appropriations to be obtained because of the large sums voted by the previous Congress, but that, when the army engineers asked for \$75,000, he did not consider it proper to withhold his aid. He felt, however, that the requests would have been granted had they been included in the bill to provide civil and diplomatic expenses, as he had originally desired. After the denial of Minnesota's requests for roads, Sibley toyed with the idea of having a new measure introduced in the Senate, asking for a single appropriation of \$15,000 for the Point Douglas-St. Louis River road. But, upon the advice of the senators from Wisconsin and Iowa, he concluded to let the matter rest. 16

Early in the following session Sibley renewed his campaign for funds by asking for an appropriation of \$45,000, which, he said, would be a sufficient sum for

16. Sibley to Ramsey, December 4, 1850, February 19, 1851, in Ramsey Papers; Minnesota Democrat, April 22, 1851; Congressional Globe, 31 Congress, 2 session, 731-736, 752.

the work on the roads in Minnesota for the coming year. Since that sum represented a decrease of \$30,000 from the figure submitted by the war department the previous spring, the House called for an explanation from the secretary of war. Sibley, however, took full responsibility for cutting down the estimates of the army officers, and pointed out that their figures were based on construction costs in Wisconsin, whereas the greater amount of prairie land in Minnesota would reduce the costs of road building by at least the difference between the two sets of estimates. He admitted that \$45,000 would not provide finished roads for Minnesota, but it would "make them passable, at least between the points where they are now most needed." The fact that, at the end of 1851, no construction work had been started but that \$12,890 had been spent for preliminary surveys, also caused some discussion in the House. Representative George S. Houston of Alabama contended that, until construction was actually begun and more accurate knowledge of future needs was obtained, there was no point in making further appropriations. Sibley retorted that contracts had been let to the limits of the appropriation, and that he had received a letter from Lieutenant Simpson in April asking whether funds would be available for the coming year. ¹⁷

17. Congressional Globe, 32 Congress, 1 session, 21, 1377, 1451. The resolution of the House, dated December 15, 1851, is in the War Department Archives, Topographical Engineers, Letters Received (Calendar, 1524). In

Houston, however, was not convinced and burst out with a violent denunciation of the measure. It was, he thundered, "internal improvement by the Federal Government, in its most odious form. I believe it brings up that system in all its length, breadth, and bearings, and for that reason I have always opposed these appropriations." Sibley took a new tack: the engineer in charge had said that the roads were necessary for the government itself; the government would save large sums annually in transportation costs. Then he expressed the philosophy of the frontier:

The Government, being the sole great land proprietor in the Territories, is bound, by every consideration of equity and justice, to make its domain accessible to the settler, by means of roads. To do otherwise, would be to abandon the policy hitherto pursued towards all your Territories. How, sir, can your lands be sold if the immigrant cannot reach them?

Sibley felt, moreover, that Congress could afford to be generous, for Minnesota had never demanded huge appropriations for lighthouses or harbors. At that point James Brooks of New York broke in to declare that the only justification for such roads lay in the anticipation

1851 Simpson submitted the following estimates of the sums needed for road construction in Minnesota: \$30,000, each, for the St. Louis River and the Fort Ripley roads; and \$20,000, each, for the Winnebago agency and Wabasha roads. At the end of 1851 a balance of about \$23,000 remained from the appropriation of 1850. Report of Abert to the secretary of war, December 22, 1851, in 32 Congress, 1 session, House Executive Documents, no. 12 (serial 637). See also Sibley to James M. Goodhue, February 28, 1852, and Simpson to Sibley, April 3, 1852, in Sibley Papers.

that they might be necessary to combat an enemy. He admitted that military roads in Oregon were of some service, but he scoffed at Sibley's argument that the Sioux were dangerous. Unless the army should decide that the roads were necessary for defense, Brooks could see no reason for them. Road construction by the federal government, he reiterated, was representative of the principle of internal improvement at the expense of the government, and he declared that the time had come to settle the question. If such benefits were accorded to Minnesota, he held, they should be accorded to all the states. This view was shared by Abraham W. Venable of North Carolina, who asserted that the government already was almost giving the land away, and he wished to know if it was a good policy, "after giving land to the landless," to make roads to the land. A majority of the House, however, held the view of Representative David L. Seymour of New York, namely, that the territories had to look to Congress for help in solving their problems, and that every state which had passed through a territorial period had gone through the same process as that which Minnesota was experiencing. The bill was passed by the House by a vote of 85 to 83. The Senate, however, failed to reach a vote before its adjournment. Twice, now, had Sibley's efforts to obtain roads for Minnesota failed.¹⁸

18. Congressional Globe, 32 Congress, 1 session, p. 1451-1455, 1532, 1535, 1682.

Minnesota's citizens, needing roads badly, must have been bitterly disappointed at this failure of Congress to provide for them. Yet, little complaint was voiced. The legislature, which is usually a barometer of public sentiment, made no comment in the form of memorials to Congress in 1851, and in 1852 it contented itself with the passage of a single memorial asking for means to continue work on the road from Point Douglas to the St. Louis River. Nothing was said of funds for other military roads. Nor did the press of Minnesota have much to say, but in the newspaper comment that did appear there was a strong undercurrent of discontent. The St. Anthony Express for June 7, 1851, carried an editorial denouncing the failure of the army to do any work on the Point Douglas-Fort Ripley road.

Now we ask, what has been done towards the construction of this road? Has the route been surveyed? Has the road been located? Has any part of the money been expended in working the road? . . . We hope this appropriation will not all be expended in paying officers and assistants for making useless surveys, while nothing is actually done towards making a road. And further, that what is actually expended, will not all be laid out below St. Paul.

The policy of the government in sending out army officers who had to spend several months in getting acquainted with unfamiliar country, while there were men in the territory who could do the work without such preliminaries, was condemned as wasteful. The same spring a grand jury for the third judicial district, investigating the activities of the army road makers, presented a report which was a blis-

tering indictment of the government's policy. 19

Criticism of that sort was allayed as construction work progressed, and it was not directed at Sibley. In the fall of 1851, however, the people were stirred up over the failure of the engineers to begin building the road to Lake Superior, and then he did come in for his share of censure. "Mr. Sibley took good care that the first road surveyed in the Territory, was from Wabashew to Mendota. He will have a bill passed by Congress if he can, to enable himself and associates to get possession of Mendota, and by claims, of the adjoining land also." Such statements arose from a fear that the roads were being neglected, although the situation probably was complicated by the uncertainty as to whether or not the treaty negotiated that summer with the Sioux Indians at Traverse des Sioux would be ratified. It was felt in some quarters that Sibley was opposed to the ratification of the treaty. Further criticism of Sibley was based on the fact that, when he went to Washington, he thought that he could best serve the interests of Minnesota by being nonpartisan. Many Democrats attributed the failure of Congress to make a road appropriation in 1851 to Sibley's refusal to take advantage of Democratic strength in Congress. 20

19. Laws, 1852, p. 64. The report of the grand jury is published in full in the Minnesota Democrat for June 24, 1851.

20. Minnesota Democrat, October 14, 1851, June 9, 1852.

In the meantime, the army engineers had been at work. Surveys, begun in 1850 by Potter, had been continued by Simpson and his assistants, and by the end of 1851 routes for all the military roads in Minnesota Territory had been surveyed, except for the Mendota-Big Sioux road, which was not regarded as imperative to the immediate needs of the settlers. The failure of Congress in 1851 to appropriate money for roads in Minnesota proved to be a handicap. Simpson reported in September, 1851, that road expenditures had amounted to \$8,725, all of which had been spent for surveys, and none for construction. He had been instructed to distribute the balances of the appropriations for work on the entire length of each road, so as to make as many miles as possible useable. On the Fort Ripley road, Simpson said, he proposed to bridge the larger streams and do minor construction work where the old Red River trail was too rough for wagons, and on the road to Lake Superior he thought it would be advisable to begin construction on the portion north of Stillwater. Although a route along the north bank of the Swan River had been surveyed for the Winnebago agency road, Simpson held that the road should not be built until a practicable route was found along the south bank of the river, for then it would be wholly within Indian country and Indians, who might use it, thus would be prevented from trespassing on lands

open to white settlement. ²¹ Early in 1852 he called for bids on several sections of the two main roads to be constructed. In the spring, impatient because of the limited amount of work he could do with the meager balance of money at his disposal, he sought permission to advertise for bids on road construction in anticipation of appropriations by Congress. This, of course, he was forbidden to do, and when Congress adjourned without making money available, Abert directed him to close his accounts and recommended that the secretary of war transfer him to the post at Rock Island, Illinois, where the army engineers were removing obstructions from the Mississippi River channel. ²²

21. Minnesotian (St. Paul), November 6, 1851; Minnesota Democrat, November 11, 1851; Minnesota Pioneer, February 19, 1852; report of Simpson to Abert, September 15, 1851, in 32 Congress, 1 session, House Executive Documents, no. 12, p. 7-12 (serial 637). The difficulty of finding a route for the Swan River-Long Prairie road is demonstrated in extracts of reports and correspondence during 1851 of Potter and Emerson to Simpson, in the Hill Papers. See also Potter to Abert, February 25, 1851, in War Department Archives, Topographical Engineers, Letters Received (Calendar, 2772). A photostatic copy of this letter is in the possession of the Minnesota Historical Society.

22. Minnesota Democrat, February 18, 1852; Minnesota Pioneer, June 24, July 1, August 12, 1852; Weekly Minnesotian, June 19, July 24, 1852; St. Anthony Express, June 25, 1852; Simpson to Abert, March 17, April 20, 1852, in War Department Archives, Topographical Engineers, Letters Received (Calendar, 3193, 3220); Abert to Simpson, September 16, 1852, in War Department Archives, Topographical Engineers, Letter Books, 15: 45 (Calendar, 2416); Abert to Conrad, September 7, 1852, in War Department Archives, Chief of Topographical Engineers to the Secretary of War, Letter Books, 5: 410 (Calendar, 182); report of Abert to the secretary of war, November 18, 1852, in 32 Congress, 2 session, Senate Executive Documents, no. 1, p. 217 (serial 659).

The Minnesota situation was not as dark as those orders made it appear. The House of Representatives had passed Sibley's appropriation bill before adjourning in the spring of 1852, and the bill had proceeded to the Senate. It was that body which refused to take action, and Congress adjourned with the bill one among many on which no vote was taken. During the summer the friends of Minnesota were at work, and, when Congress met in the fall, the Minnesota road appropriations bill was still very much alive. Late in December the Senate passed the bill, and it was signed by President Fillmore on January 7, 1853. A letter from Sibley to the editor of the Minnesota Pioneer, published in that paper on January 20, 1853, made the announcement to the people of the territory, while Colonel Abert notified Simpson that he should continue his work in Minnesota. However, it was not until mid-April that Simpson was able to obtain even a portion of the funds, which were so apportioned that \$20,000 was allotted to the Point Douglas-St. Louis River road; \$10,000 to the road to Fort Ripley; \$5,000 to the Swan River-Long Prairie road; \$5,000 to the Mendota-Wabasha road; and \$5,000 for surveying and laying out the road from Mendota to the mouth of the Big Sioux River. 23

23. Minnesota Pioneer, February 17, 1853; Statutes at Large, 10: 150; N. J. Faulkner to Abert, July 17, 1852, in War Department Archives, Topographical Engineers, Letters Received (Calendar, 885); Abert to Simpson, January 10, April 14, 1853, in War Department Archives, Topographical Engineers, Letter Books, 15: 224, 432 (Calendar, 2468, 2571).

Under the stimulus of additional funds, road making went ahead rapidly during 1853. Contracts were let on portions of all four of the main roads to be constructed. Simpson's report, made on September 17, 1853, shows that the road from Point Douglas to Lake Superior was completed, and in traveling condition from Stillwater to a point twelve miles north of Taylor's Falls, a total of forty-three miles. The road to Fort Ripley was in passable condition over its whole route. Construction during the summer had totaled twenty-eight miles and included a bridge over the Rum River at Anoka. Not as much work had been done on the other two roads, where the problems of engineering and construction were much more complex. On the Mendota-Wabasha road, which followed the Mississippi River, the difficulty was greatest, since the steep hills had to be graded, the deep streams bridged, and the numerous sloughs filled. Therefore, Simpson asked for an additional appropriation of "not less than \$15,000 on account of the bridging which is absolutely required on the road to make it passable." 24

Simpson made no mention in his report of the survey of the Mendota-Big Sioux road, which was made that summer. The original appropriation for the survey was made in 1850, and as one year, and then two years, passed

24. Report of Simpson to Abert, September 17, 1853, in 33 Congress, 1 session, House Executive Documents, no. 1, p. 28 (serial 712).

without action to map the route, considerable anxiety was manifested by the settlers along the route it was generally supposed the road would follow. The treaty of Traverse des Sioux was not ratified until the summer of 1852, but that had not discouraged squatters from staking out claims and selecting townsites on the Sioux lands. There were 20,000 settlers in the region west of the Mississippi as early as the spring of 1852, and, when the government failed to open a road to St. Paul for them, the squatters on the public lands determined to do so on their own initiative. Subscriptions were solicited by Captain William B. Dodd of Traverse des Sioux and by Auguste L. Larpenteur of St. Paul from citizens of the two communities. The exact amount of the contributions is not recorded, but early in January, 1853, Dodd announced that the Traverse des Sioux contributions alone amounted to more than \$400. As soon as spring came, Dodd began the work, and by the middle of July he had chopped out a road through the woods along the ridge separating the drainage basins of the Minnesota and Cannon rivers. It was a rough trail, sixty-five miles long, but it was an all-weather road, and it opened communication for both valleys with St. Paul. 25

25. J. Wesley Bond, Minnesota and Its Resources, 22 (New York, 1853); Minnesota Pioneer, July 8, 22, December 23, 30, 1852, January 6, 1853; Minnesota Democrat, August 18, 1852, April 6, June 8, July 6, 20, 1853; Weekly Minnesotian, May 14, 1853. Simpson estimated that it would have cost the government \$2,000 to make

The efforts of these pioneers anticipated the beginning of work by the government by a matter of a few weeks. Early in April, 1853, Lieutenant Simpson was making inquiries about the possibility of obtaining supplies at the mouth of the Big Sioux River, and on May 4 Captain J. L. Reno was named by Colonel Abert to take charge of the survey. On May 20 Reno and his men left St. Louis for the mouth of the Big Sioux River. The party was at Mankato on July 25, and on August 20 the survey to Mendota was completed. From the mouth of the Big Sioux River, Reno's route followed the valley of the Floyd River for about forty miles, and then struck out in a generally northeasterly direction to the Minnesota-Iowa line in the southwestern corner of present-day Martin County. From this point, Reno turned northward to reach the Watonwan River, and from there he worked his way northward toward Mankato. He found that the road which Dodd had made was, with minor exceptions, the shortest and most practicable route to St. Paul from Traverse des Sioux, and his route, therefore, followed the Dodd road. His men did just enough construction work along the way to permit the passage of the army wagons which made up the train. It is significant either of the eagerness of the frontier for roads, or of the lack of frontier means the road. Simpson to Abert, April 25, 1854, in War Department Archives, Topographical Engineers, Letters Received (Calendar, 3552). A photostatic copy of this letter is in the possession of the Minnesota Historical Society.

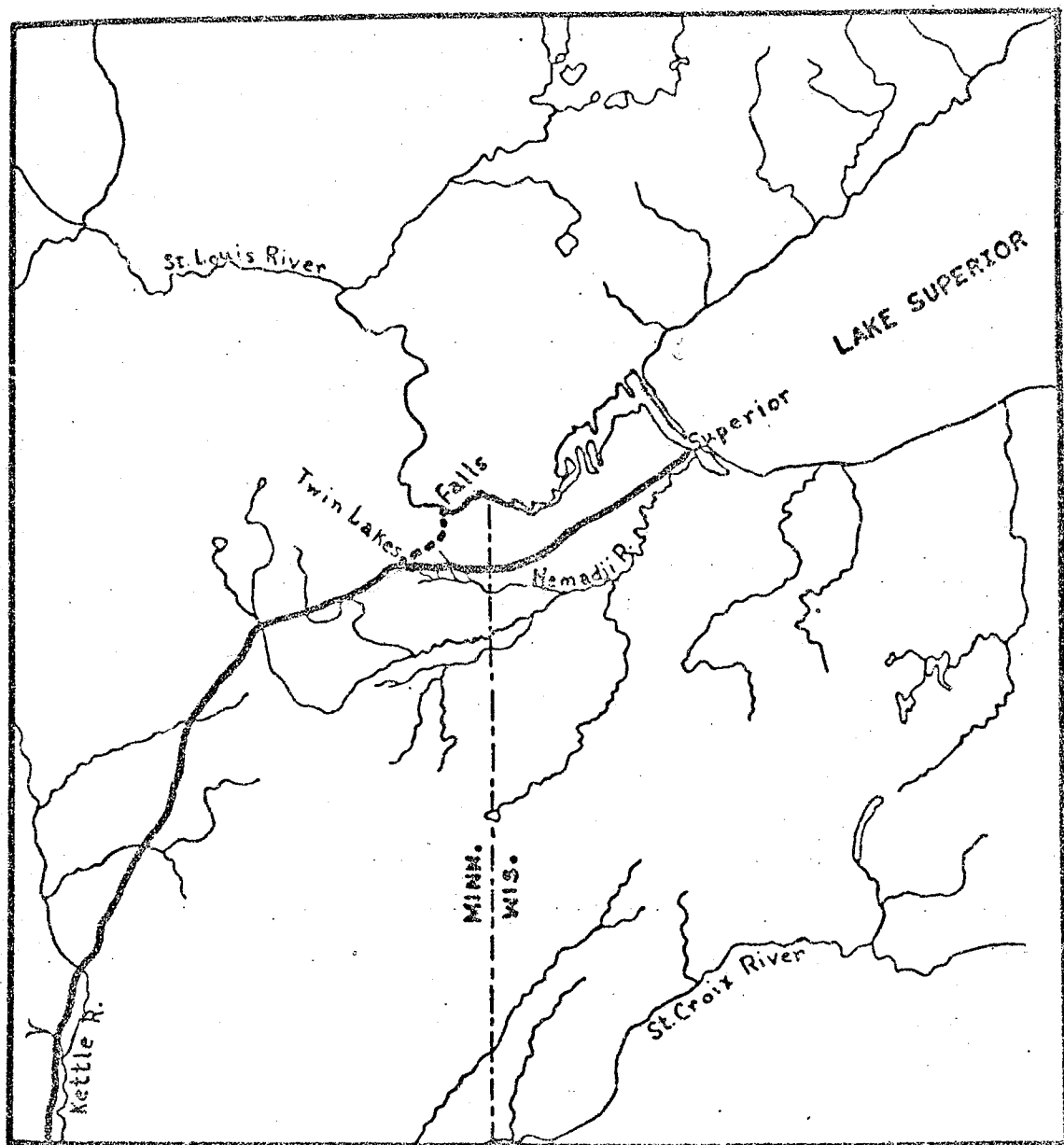
of communication, that the completion of Reno's journey immediately branded the road as "practicable" for those eager souls crowding in upon the wilderness. 26

The year 1853 marked a turning point in the history of the military roads in Minnesota, for by the end of that year work was in progress on every one of the roads contemplated in the program that Sibley had submitted to Congress four years earlier. As a result, when the rush of incoming settlers began, the country was not entirely

26. Minnesota Democrat, September 7, 1853; Minnesota Pioneer, September 8, 1853; Simpson to Fred B. Sibley, April 12, 1853, and Reno to Henry H. Sibley, July 17, 24, 1853, in Sibley Papers; Reno to Abert, July 30, 1853, in War Department Archives, Topographical Engineers, Letters Received (Calendar, 2970); Abert to Reno, May 5, 1853, in War Department Archives, Topographical Engineers, Letter Books, 16: 38-42 (Calendar, 2607). The Minnesota Historical Society has a copy of the latter letter. Because the Dodd road was accepted as part of the route for the Mendota-Big Sioux road, Dodd entered a claim against the federal government for expenses incurred in its construction, and the Minnesota legislature adopted a joint resolution praying for the "relief of William B. Dodd" who "opened and constructed a road from St. Paul to Traverse des Sioux, which he claims to have been adopted as a part of the Government road from Mendota to the Mouth of the Big Sioux River." The claim was disallowed on the grounds that citizens of St. Paul, and presumably also of Traverse des Sioux, had raised money for the road by subscription and had paid it to Dodd before he began work on the road. Laws, 1854, p. 154; Simpson to Abert, April 25, 1854, and Reno to Abert, May 6, 1854, in War Department Archives, Topographical Engineers, Letters Received (Calendar, 3552, 2980); Abert to Jefferson Davis, May 6, 9, 1854, in War Department Archives, Chief of Topographical Engineers to the Secretary of War, Letter Books, 7: 113-115, 116 (Calendar, 322, 324). The Minnesota Historical Society has photostatic copies of these letters. In his letter of May 9 to Davis, Abert quotes Rice as stating that Dodd had received from citizens of St. Paul "an amount of money to meet expenses."

unprepared to receive them. The year, too, marked the retirement of Sibley from the delegacy to Congress. He was succeeded by Henry M. Rice, and the choice was a happy one, for Rice, like Sibley, distinguished himself by his efforts to serve Minnesota. His term of office began in December, 1853, and he served as delegate throughout the remainder of the territorial period. When statehood was achieved, he became one of the United States senators from Minnesota. 27

Rice experienced little difficulty in getting funds for the continuation of road construction in Minnesota. On July 17, 1854, his measure, providing for an appropriation of \$50,000, became effective. This sum was so apportioned that \$15,000 was allocated to the Mendota-Wabasha road, \$5,000 to the Swan River-Winnebago agency road, \$10,000 to the Point Douglas-Fort Ripley road, and the balance, \$20,000, to the road from Point Douglas to Lake Superior. The law also changed the northern terminus of the road so that instead of ending at the falls of the St. Louis River it extended to St. Louis Bay in Wisconsin. The change was a logical one, for the old terminus was far from navigable water, and the lands on the Minnesota side of the head of Lake Superior were set aside for a military reservation and, therefore, were not open to settlement. When the question was considered in the House,



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the change in the terminus was reported to have the full approval of settlers and federal authorities alike. At the time it provoked little comment, but within a short while it became a storm center about which the political discontent in the territory gathered. 28

There was no provision for work on the Mendota-Big Sioux road in the 1854 bill appropriating money for Minnesota roads. In the army appropriations bill, however, the sum of \$25,000 was set aside for that road. Because of an error in the printed act this sum was to be used for "completing" the road -- a paltry amount for a road that was to be 279 miles long. Rice called the error to the attention of Colonel Abert and the secretary of war, but the measure had already been passed and the bureau was forced to adjust its needs to the amount of money available. Rice's first session in Congress, therefore, brought appropriations totaling \$75,000 for use in constructing Minnesota roads. 29

28. Congressional Globe, 33 Congress, 1 session, 88, 182, 562, 1031, 1052, 1059, 1621, 1671; Statutes at Large, 10: 306; Daily Minnesotian (St. Paul), July 24, 1854. On December 23, 1853, Rice asked Abert for an estimate of the funds needed to complete the roads in Minnesota. "I wish to introduce a bill next week making appropriations to complete said roads. When finished they will be of the greatest importance to the people of the Territory, as they are now they are of little use." War Department Archives, Topographical Engineers, Letters Received (Calendar, 2979). The Minnesota Historical Society has a photostatic copy of this letter.

29. Statutes at Large, 10: 581; report of Simpson to Abert, September 15, 1854, in 33 Congress, 2 session, Senate Executive Documents, no. 1, p. 347 (serial 747);

Rice's success in obtaining road funds for Minnesota continued throughout the remainder of the territorial period. As a result of his careful and clever maneuvering in the session of 1854-55, Congress appropriated upwards of \$90,000 for the completion of the roads already under construction.³⁰ In response to demands from people of Minnesota, appropriations were also made for two new roads. One of these was designed to connect Fort Ridgely, the new fort on the Minnesota River above New Ulm, with the head of navigation on the Mississippi. The Minnesota legislature had already authorized the laying out of a road from St. Anthony Falls to Fort Ridgely, so the act provided simply for cutting out the timber on the road, for which purpose \$5,000 was deemed sufficient. The increasing trade with the Red River country and the passage of an act authorizing the construction of a new fort on that river necessitated the improvement of means of communication with the region. For this purpose, Congress authorized the expenditure of \$10,000 for cutting the timber on the

Rice to Abert, August 9, 1854, in War Department Archives, Topographical Engineers, Letters Received (Calendar, 2984); Abert to Davis, August 11, 1854, in War Department Archives, Chief of Topographical Engineers to the Secretary of War, Letter Books, 7: 210-212 (Calendar, 351).

30. The amounts appropriated were: for the Point Douglas-St. Louis River road, \$34,213.50; for the Point Douglas-Fort Ripley road, \$13,494.09; for the Swan River-Winnebago agency road, \$2,535.39; for the Wabasha-Mendota road, \$13,871.76; for the Mendota-Big Sioux road, \$27,475.68. Statutes at Large, 10: 638.

road from Fort Ripley by way of the Crow Wing River to the "main road leading to the Red River of the north." 31

With all this money available, Simpson was able to push the work, and his report, submitted in September, 1855, testifies to his success. The road from Point Douglas to Fort Ripley, 146 miles in length, was reported to be completed with the exception of three miles between St. Paul and Point Douglas, a short distance in St. Paul through which a right of way was denied by Lyman F. Dayton, a similar small stretch about five miles above St. Anthony through land owned by Abram M. Fridley, and the grading of the bank where the road crossed Rice Creek. The sum appropriated for this road by the Congress of 1854-55 had not been the amount Simpson had asked for in his 1854 report, however, and in

31: Statutes at Large, 10: 610. The demand for a road to Fort Ridgely arose as soon as the establishment of the post was authorized. In August, 1853, citizens of communities in the Minnesota Valley raised enough money by subscription to open a rough road from Traverse des Sioux to the fort, and by the end of the year they were clamoring for the establishment of a mail route. When agitation for a road assumed serious proportions, there was a contest to determine which of three routes would be adopted. One group favored the selection of a route through Mankato, a distance of 138 miles from St. Paul. A second group wished to route the road via Traverse des Sioux, a distance of 121 miles from the territorial capital. A third group, the one which eventually won, favored a route 101 miles long, reaching Fort Ridgely from St. Paul by way of Henderson. Minnesota Democrat, November 17, 1853; Weekly Minnesotian, August 6, 1853; St. Anthony Express, December 3, 1853; Minnesota Pioneer, April 20, 1854; St. Paul Daily Times, January 31, 1855.

1855 he asked for \$4,696 to complete some slight grading and stump removal projects on the road below St. Paul. A stagecoach line had been operating from St. Paul to Crow Wing for the past two years, using the military road where it was completed and following the old Red River trail at other places. The Swan River-Winnebago agency road, an offshoot of the Fort Ripley highway, was reported entirely finished. The Wabasha and Mendota road, which was seventy-six miles long, Simpson reported to be in traveling condition throughout its length. Its importance in transporting supplies to St. Paul and the upper Minnesota country during the spring season, when navigation was prevented by the sluggish breaking up of the ice in Lake Pepin, was recognized almost from the beginning, and as early as 1855 the people were talking of extending it to the Iowa line. 32

32. Reports of Simpson to Abert, September 15, 1854, in 33 Congress, 2 session, Senate Executive Documents, no. 1, p. 347 (serial 747), and September 20, 1855, in 34 Congress, 1 session, Senate Executive Documents, no. 1, p. 472 (serial 811); Weekly Minnesotian, September 10, 1853; Daily Minnesota Pioneer, August 16, September 25, 1854, March 10, July 20, 1855; St. Paul Daily Times, July 19, 1855. The problem of securing a right of way was one which occasioned considerable difficulty. Under the existing laws, the attorney general of the United States held, there was no way to compel private owners to grant a right of way. Abert, therefore, instructed Simpson not to attempt any construction in such cases, but to stop work at the line of the disputed property. Abert to Simpson, July 7, 14, 1855, in War Department Archives, Topographical Engineers, Letter Books, 19: 148, 169 (Calendar, 3317,

Simpson was given no jurisdiction over the Mendota-Big Sioux road until late in the summer of 1854. No contracts for building it were let, therefore, until the spring of 1855. Yet, Simpson reported that forty-one of the eighty-nine and a half miles between Mendota and Mankato were completed and that the whole division between those two points would be completed before the end of the season. However, the quality of the work done on this road was inferior to that on the rest of the military roads in Minnesota, because only \$25,000 was allowed for its completion.

Work on the two new roads for which money had been appropriated in March, 1855 -- the St. Anthony Falls-Fort Ridgely road and the Red River road -- was at a standstill. Early in June Simpson's engineers made a reconnaissance of the old Red River trail from Fort Ripley, and reported that it was extremely crooked, and that, since it did not follow the best grades, it was subject to inundation during wet seasons. If good engineering principles were to be followed, the route of the road should be changed. Simpson requested the opinion of a number of men whose judgment would have

3322). The Minnesota Historical Society has a photostatic copy of the letter of July 7. The difficulty was solved by the passage of a law by the territorial legislature in 1856 which declared the military roads to be territorial roads, and made it possible to obtain a right of way through private property under existing territorial laws. Laws, 1856, p. 152; post, p. 236.

weight -- Sibley, Rice, Governor Willis A. Gorman, Norman W. Kittson, who was a resident of Pembina, a member of the territorial legislature, and acquainted with the route, and Charles T. Cavileer, likewise a resident of Pembina -- and they agreed with him that it was better to postpone action on the road until Congressional consent could be obtained to the construction of a road which would better fit the needs of the region. Reluctantly, the war department consented to this postponement. Two years went by before the project was taken up.

On the road from St. Anthony to Fort Ridgely no work had been done, because the act of Congress authorizing the appropriation had specified that the timber was to be removed from a territorial road already laid out, but, when Simpson was ready to begin work, he found that, although the territorial legislature had authorized the laying out of the road and had appointed commissioners to do the work, nothing had been done. He made repeated efforts to get the commissioners to act, but up to September, 1855, they had done nothing toward laying out the road, and the federal appropriation, therefore, remained unexpended. In part the inactivity of the territorial agents may be explained by the competition between various towns for the road. Not until July, 1857, was the dispute settled, the road laid out, and the way

open for the federal government to prosecute the work. 33

To the majority of Minnesotans in 1855, the most important of the government roads was that extending from Point Douglas to Lake Superior. It was valuable not only because it penetrated into the first settled part of the territory and because it gave access to a region rich in lumber resources, but also because it supplied a connection with the Great Lakes. Up to the middle fifties, the value of this outlet was theoretical, rather than practical. In 1855, however, the completion of the Sault Ste. Marie Canal made it possible for lake ships from Chicago, Buffalo, or any other lower Great Lakes port to dock at wharves at the head of the lakes without transshipment. Minnesota, therefore, had as easy access to eastern markets, and was as easy of access from the East, as any of the agricultural states of the Middle West. To capitalize on this great advantage, however, it was necessary to have some means of

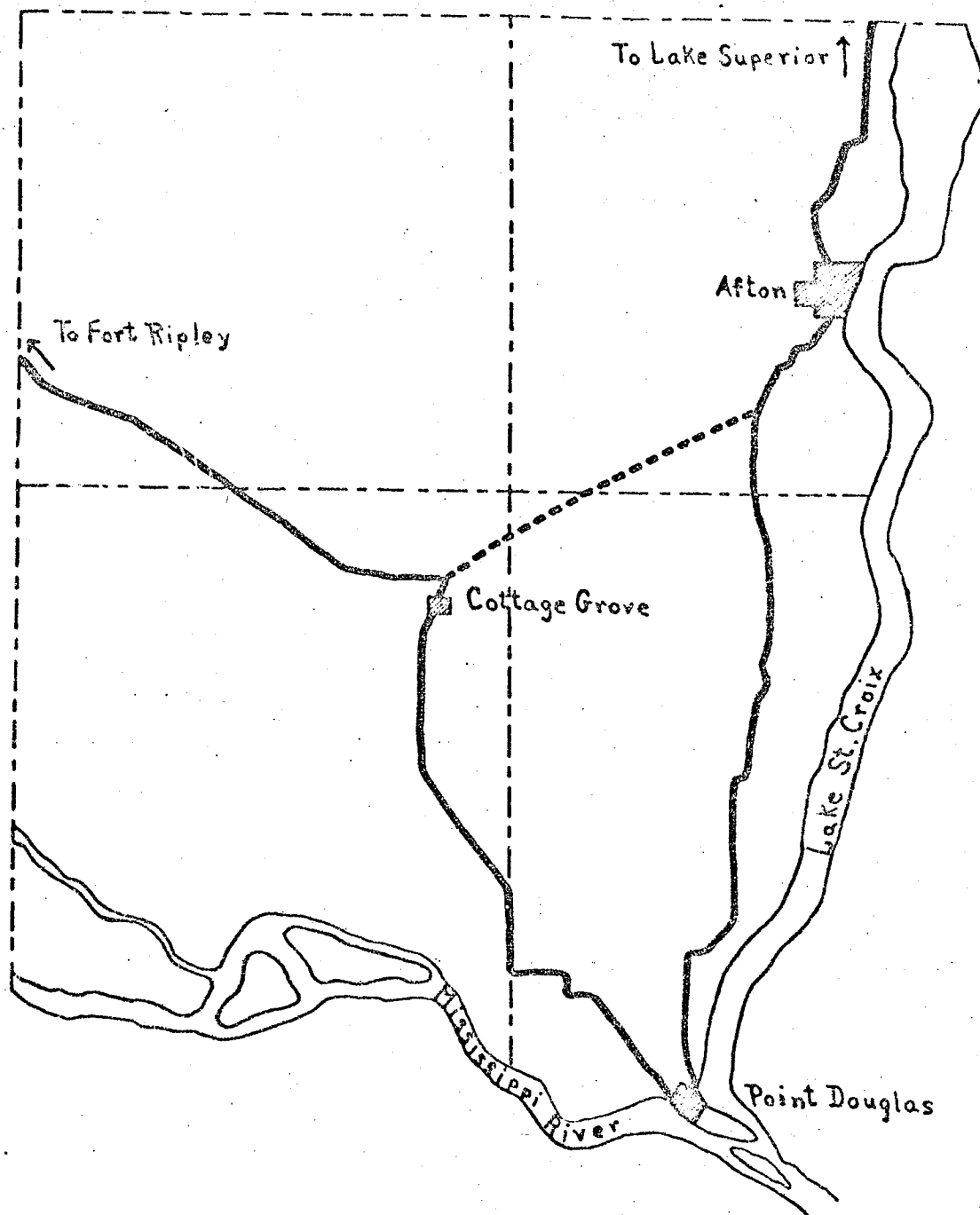
33. Reports of Simpson to Abert, September 15, 1854, in 33 Congress, 2 session, Senate Executive Documents, no. 1, p. 346, 347 (serial 747), and September 20, 1855, in 34 Congress, 1 session, Senate Executive Documents, no. 1, p. 473, 474, 475, 480 (serial 811); Laws, 1855, p. 185; Daily Minnesotian, September 1, 1854; Daily Minnesota Pioneer, December 11, 28, 1854. Simpson's correspondence with Sibley, Rice, Gorman, Kittson, and Cavileer, together with a letter from Simpson to Abert, dated July 21, 1855, and one from Abert to Davis, dated August 2, 1855, are printed in Appendix A to Simpson's report of September 20, 1855. See also post, p. 107; report of George Thom to Abert, September 5, 1857, in 35 Congress, 1 session, Senate Executive Documents, no. 11, p. 353 (serial 920).

getting to the lake waterway. For the past two years the people of Minnesota had been toying with the idea of a railroad connecting the head of Lake Superior with the agricultural portions of Minnesota and of the upper Mississippi Valley. In 1853 the legislature chartered a railroad for that purpose, and in Congress Rice obtained a grant of land to aid in its construction. The exposure of an audacious fraud in the organization of the company brought about the revocation of the grant, and the prospect for another grant for railroads appeared slight in 1855. Interest in the completion of the military road, therefore, was keener than it would have been had the railroad materialized. ³⁴

On this road Simpson had expended his best efforts. He was hampered at first by the necessity for changing the northern terminus of the route in accordance with the act of July, 1854, as well as by a provision in the same act that he build the northern portion before continuing work on the remainder of the road. It was not until October that he was able to begin his surveys, and, by the time they were completed, it was too late in the season to undertake construction work. In answer to his protests against spending the entire appropriation on the northern section the secretary of war granted him permission to distribute the appropriation so as to put

34. Folwell, Minnesota, 1: 327-350.

the road in as good condition as possible over its entire length. During the winter of 1855, therefore, Simpson advertised for bids to clear the entire roadway to a width of twenty-five feet, and to grub out all roots and stumps for eighteen of the twenty-five feet. The same winter Congress appropriated funds for the completion of the road. Simpson proceeded with his earlier plans of making first a narrow trail, and then, as the appropriation should permit, improving the whole road. By the time he made his report in the fall of 1855, the first phase of the work was well under way. He was experiencing difficulty on the northern extension of the road, because his men had made the surveys during the winter when the ground was covered with ice and snow, and a considerable portion of it had had to be resurveyed when spring came. This, in turn, slowed the work of the contractor. The southern portion of the road presented still another problem. The act authorizing the construction of the road specified that it should pass through Cottage Grove, which was located several miles west of the most direct route between Point Douglas and Stillwater. Protests from the citizens of the territory resulted in Congressional authorization for a change in the route, which was incorporated in the appropriation act of 1853. By 1855 the new route, running almost directly north and south,



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had been staked out. 35

In spite of the progress that had been made in the construction of the military roads, there was considerable dissatisfaction among the people of the territory. The need for some of the roads, such as that to Lake Superior, was so imperative that the Minnesota pioneers could not brook the necessarily slow work of the army engineers. During 1854 and 1855 their criticisms became increasingly vociferous, the newspapers of the territory being the medium through which the criticisms were made public. The editor of the St. Anthony Express, for example, questioned, as he had done in 1851, the necessity for sending high-salaried engineers out to survey routes for the Point Douglas-Fort Ripley road when there were "men in Minnesota so perfectly familiar with the whole country, as to be able to point out the proper location for a Government road, without weeks and months spent in making preliminary surveys." Maps, surveys, and estimates were all very well, he thought, but what Minnesota wanted was roads -- something tangible to show for the large sums of money that Congress had been appropriating. In an issue published a few weeks earlier, he had suggested that roads would mate-

35. See ante, p. 67; report of Simpson to Abert, September 20, 1855, in 34 Congress, 1 session, Senate Executive Documents, no. 1, p. 469-472 (serial 811); Holcombe to Sibley, March 27, 1852, in Sibley Papers; Statutes at Large, 10: 150.

realize more quickly, if, instead of waiting for the federal government to construct them, the territory itself did so. 36

Much of this kind of criticism was inspired by a genuine concern over the delay in providing the territory with roads, but a good deal of it undoubtedly was rooted in a bitter personal quarrel between Simpson and Rice. Simpson was able, conscientious, and hard-working, but he was also inclined to be irascible and quick-tempered, and, perhaps, a bit stubborn. He had a great deal of admiration for Sibley, and the two men worked in harmony while Sibley was delegate in Congress. However, it was this friendship toward Sibley that brought the antagonism between Simpson and Rice into the open.

One evening in March, 1852, Simpson was present at a meeting held in St. Paul for the purpose of discussing the delay of Congress in ratifying the Sioux treaties negotiated the summer before. In the course of the debate, William Hollinshead, a brother-in-law of Rice, accused Sibley of working to defeat the ratification of the treaties for his own interests. Simpson had no great liking for Hollinshead, whom he believed to have been the author of a report by the grand jury for the third judicial district of the territory of Minnesota in the spring of 1851 in which the work of the government

36. See ante, p. 58; St. Anthony Express, December 17, 1853, January 7, 1854.

men in surveying the Point Douglas-Fort Ripley road was condemned "as a humbug, and a gross misapplication of the funds of the government," and he denounced the speaker and his associates in no uncertain terms. That incident marked the beginning of a quarrel that lasted as long as Simpson remained in Minnesota. The dispute caused work on the roads to be slowed down, the road question to be plunged into Minnesota politics, and, eventually, it led to the entrusting of a great deal of road construction in Minnesota to departments of the federal government other than the war department. 37

The conflict with Rice even entered into Simpson's family affairs, for his brother-in-law, Charles L. Emerson, became a close friend of Rice. Emerson, a civil engineer, came to Minnesota as Simpson's assistant. He was well qualified for his work, but the temperaments of the two men did not agree, and the discord was not improved by the friendship which Emerson displayed toward Rice. The break between them came in 1853, when Rice complained to Colonel Abert of the slowness with which road construction in Minnesota proceeded, and requested that Emerson be put in Simpson's position. Members of the Rice faction also circulated petitions for

37. See *ante*, p. 58; Simpson to Sibley, April 3, 1852, in Sibley Papers; Simpson to Abert, May 22, 1854, and September 10, 1855, in War Department Archives, Topographical Engineers, Letters Received (Calendar, 3580, 3851). Photostatic copies of these letters are in the possession of the Minnesota Historical Society.

Simpson's removal which were sent to Washington. Colonel Abert, however, stood loyally behind his subordinate.³⁸ The Rice faction, through its organ, the Minnesota Democrat, continued to attack Simpson, implicitly criticizing him while praising the work of other officers of the topographical corps. Simpson, furious at the attempt to drive him from the territory, retaliated through the medium of the St. Paul Minnesotian, defending his record and giving Rice and his faction an ill-natured and emphatic berating.³⁹

Rice's election as delegate to Congress in 1853 did not improve the situation, for the two men who should have worked together for the good of the territory were bitter enemies. Simpson's position was difficult, for he knew that political pressure, if brought to bear upon his superiors, might cost him his Minnesota position. The lack of harmony might also result in a decrease in future appropriations, or even in the cancellation of the road-building projects. When Emerson, whom Simpson

38. Rice to Abert, April 27, 1853, Hollinshead and others to Abert, April 17, 1853, Simpson to Abert, May 22, 23, 1854, September 10, 1855, in War Department Archives, Topographical Engineers, Letters Received (Calendar, 2965, 2966, 3580, 3581, 3851); Abert to Hollinshead and others, May 7, 1853, in War Department Archives, Topographical Engineers, Letter Books, 16: 45 (Calendar, 2610). Photostatic copies of these letters are in the possession of the Minnesota Historical Society.

39. Minnesota Democrat, June 29, July 6, 1853; Weekly Minnesotian, July 2, 1853; Minnesota Pioneer, July 7, 1853.

discharged, was made editor of the Minnesota Democrat, the personal quarrel was used to feed the flames of the political conflict that divided Minnesota into hostile camps. 40

In the fall of 1854 the government roads of Minnesota became involved in the struggle over the Congressional grant of land to aid in the construction of the railroad from Lake Superior to Iowa. The railroad land grant scheme was diligently pushed by the proprietors of the city of Superior, Wisconsin, composed mostly of St. Paul men, including Rice and his brother, for their young city was designated as an alternate and possibly the principal northern terminus of the proposed railroad. One bill to authorize the grant of lands was smothered by the opposition in Congress, but the backers of the project soon introduced a new bill which was acceptable to both houses. It was in the interval between the suppression of the first bill and the introduction of the second one, that the measure appropriating money for Minnesota roads was amended so that the northern terminus of the Point Douglas-St. Louis River road was placed at the mouth of the St. Louis River in Wisconsin, in other words, at Superior. Perhaps no one would have thought a great deal of this change, if

40. Simpson to Abert, May 22, 1854, in War Department Archives, Topographical Engineers, Letters Received (Calendar, 3580). The Minnesota Historical Society has a photostatic copy of this letter.

the territory had not been shocked by the exposure of a gigantic fraud in the attempt of a few individuals to gain control of the land grant for the railroad. The territory split into two camps, one, led by Sibley, condemning the land grant and the perpetrators of the fraud, and the other, headed by Rice, defending the railroad scheme. It was natural, under the circumstances, that the acts of all persons involved in the scheme should be suspected, and the motives which led Rice to suggest the logical change in the northern terminus of the military road so as to bring it to the lake shore were interpreted by his enemies to be a gross misuse of political office for private gain. 41

What irked Minnesotans most about the whole affair, was that the terminus of the military road was given to Wisconsin. They did not deny the logic of the change, but they foresaw that the community at which the road terminated would have an economic advantage over all other points at the head of the lake. In July, 1854, one Minnesota editor, perceiving this fact, cried out, "What does it all mean?" In an editorial in mid-August he put the question to his readers: "Who Shall Command the Commerce of Lake Superior?" He held that it was "treason to the future welfare and

41. See ante, p. 67, 75; Congressional Globe, 33 Congress, 1 session, 1031. For an account of the railroad land grant fraud, see Folwell, Minnesota, 1: 329-350.

glory of Minnesota," to let this prize fall into the hands of another state. At the terminus of the road, he said, "the travel and trade will eventually form a nucleus of a town, and that will attract the terminus of our great Railroad to be built by lands in the bosom of our Territory." He appealed for united support from the independent newspapers of the territory in thwarting the scheme. 42

When Simpson's quarrel with Rice became public property, public opinion was divided. Those who sympathized with the efforts made by Rice to obtain a railroad charter for Minnesota defended him in his quarrel with Simpson, while those who opposed what to them was an evident effort to defraud the people came to the aid of Simpson. When Simpson was slow in making use of the appropriations of 1854, the exasperated editor of the Saint Croix Union of Stillwater accused him of misappropriating the funds allotted for the road to Lake Superior and of lending the money to local bankers for investment purposes. The Minnesota Democrat took up the accusation against Simpson and added to the charge of misappropriation others of indolence and incompetence. The letting of contracts for construction on the Lake Superior road put a quietus on the pen of the Stillwater editor, but the Rice faction persisted

42. St. Anthony Express, July 22, August 19, 1854.

in their efforts to have Simpson removed. As a result of another request by Rice, in October, 1854, for the dismissal of Simpson, a thorough investigation of the charges was made. While the verdict was never published, Simpson must have been vindicated, for he was not removed.⁴³

It was a foregone conclusion that Rice would be a candidate for re-election in 1855, but he must have been surprised at the bitterness of the opposition to his candidacy when the campaign began. He based his claim to consideration for re-election on his record, and the Minnesota Democrat pointed to it with pride: he had secured four new public land offices for Minnesota; the road appropriations secured through his efforts had reached a total of more than \$200,000; he had labored strenuously for a grant of lands for railroad construction in the territory; and he had been responsible for the negotiation of Indian treaties which had done much to open Minnesota lands to white

43. Saint Croix Union, November 25, December 26, 1854, January 23, 1855; Daily Minnesota Pioneer, January 1, 16, 1855; Daily Minnesotian, January 13, 1855; St. Paul Daily Times, January 16, 19, 1855; Minnesota Democrat, January 17, 1855; Rice to Davis, October 20, 1854, Rice to Abert, January 1, 1855, in War Department Archives, Topographical Engineers, Letters Received (Calendar, 2986, 2987); Abert to Simpson, January 17, 1855, Abert to Rice, December 30, 1854, in War Department Archives, Topographical Engineers, Letter Books, 18: 288, 262 (Calendar, 3205, 3196); Abert to Davis, December 30, 1854, in War Department Archives, Chief of Topographical Engineers to the Secretary of War, Letter Books, 7: 333 (Calendar, 382). The Minnesota Historical Society has photostatic copies of these letters.

settlement. His claims were promptly challenged by Sibley. A Rice adherent, replying to Sibley through the Minnesota Democrat, strove to demonstrate that the people of Minnesota owed less to Sibley than to Rice. Sibley, Rice's defendant said, was able to obtain for Minnesota only \$85,000 in road appropriations during five years in Congress while for himself "he gained a town site worth over 100,000 dollars, and the expenditure of a large amount of the road money to enhance the value of his town site." Rice's efforts, he continued, in two years had yielded the country "a clear gain of \$200,889.65." 44

Simpson thereupon entered the campaign, and in an open letter published in the Pioneer he expressed his views on the question of road appropriations. Sibley alone deserved the credit for initiating the system of roads and obtaining the first appropriations, he affirmed. Rice's contributions were practically nil, he claimed, for since Sibley's retirement from Congress the road appropriations totaled almost exactly what the war office, guided by Simpson's recommendations, had requested. Rice, Simpson admitted, had obtained appropriations for four roads, but they were insignificant

44. Folwell, Minnesota, 1: 373-377; Minnesota Democrat, June 13, July 25, 1855; Daily Minnesota Pioneer, July 19, 1855; St. Anthony Express, August 11, 1855. The townsite to which reference is made is Mendota, at which two of the government roads terminated.

and only two of them had been entrusted to the topographical engineers. On one of these, the road from Fort Ridgely to Minneapolis, no work had been done because, Simpson claimed, Rice had worded the bill so that the appropriation had to be applied on a territorial road that had not yet been laid out. On the other road, that from Crow Wing to the Red River, he continued, no work had been done because the language of the bill required the money to be expended on a road that was so crooked and so poorly routed that, according to the opinion of men who knew the situation, it would be a waste of public funds to do any work until the official consent of Congress was obtained to change its course. 45

Other newspapers and men who were fighting the reelection of Rice took up Simpson's charges. One editor went so far as to state that "had there been no Delegate in Congress, and Mr. Simpson had made the recommendation, Minnesota would probably have received the same amount." He added that the railroad grant had been lost through Rice's avarice and his connivance at a fraud, and that he had injured Minnesota by diverting the terminus of the Point Douglas-St. Louis River road to Wisconsin "to benefit his embryo city." Another opponent accused Rice of being bound up with the Superior crowd, and declared that his work in obtaining

45. Daily Minnesota Pioneer, August 17, 1855.

land offices and Indian treaties might as well not have been done, for all the good they did, while his road appropriations were of no use to the people. The credit due him, the same antagonist stated, he was entitled to take, for that could "be compressed into a remarkably small space." Rice was so angry at these attacks that he wrote again to the secretary of war to show him "how Captain Simpson is disposing of his time while our roads are being neglected." Simpson, however, had already reported the correspondence to his superior, and in the Pioneer for August 23, 1855, defended his actions by asking why Rice should be allowed to try to drive him from the territory without granting him the "poor privilege of showing to the public that I have been true to their interests, even when by so doing I may only give to Mr. Rice all the credit which he or any body can justly say he is entitled to." ⁴⁶ The Minnesota Democrat calmly replied:

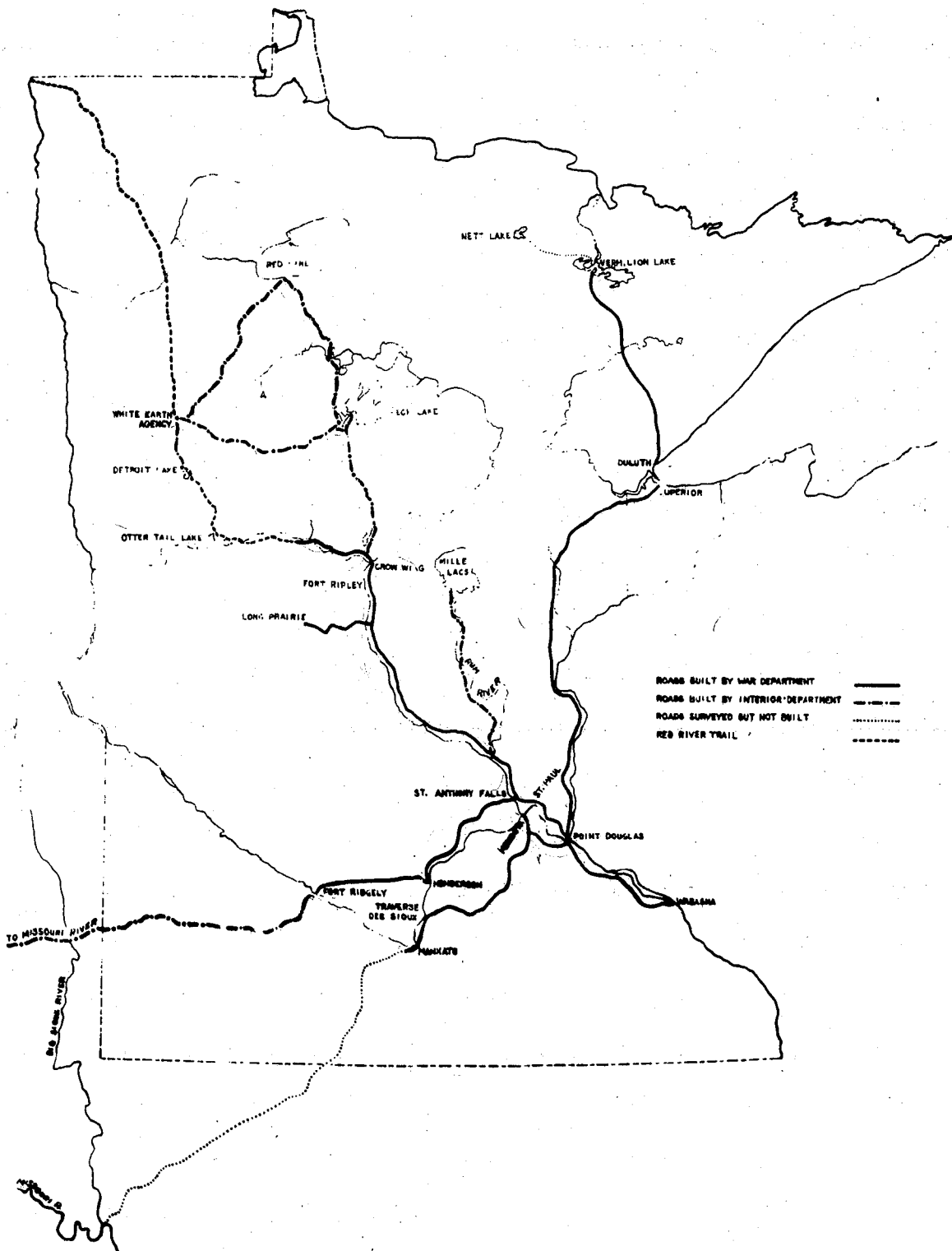
We do not like to say that Capt. Simpson is an ass. Indeed, we do not think he is -- quite; if he were he would have shown less ears. . . . An idiot would scarcely be so silly as to suppose

46. Daily Minnesota Pioneer, August 19, 23, September 4, 25, 1855; St. Paul Daily Times, August 20, 28, September 8, 1855; Minnesota Democrat, August 22, 29, 1855; Folwell, Minnesota, 1: 373-375; H. Fletcher to Sibley, August 10, 1855, in Sibley Papers; Rice to Davis, August 22, 1855, Simpson to Abert, August 11, September 10, 1855, in War Department Archives, Topographical Engineers, Letters Received (Calendar, 2989, 3818, 3852). Photostatic copies of these letters are in the possession of the Minnesota Historical Society.

that because the former delegate asked for the construction of certain roads, and obtained a small appropriation therefor, and because Capt. Simpson recommended further appropriations, Congress would, therefore, grant them, as a matter of course. . . . Let us have the money promptly expended, Captain Simpson, without reference to who is running for Congress, or which side you are on, and we will speak a good word for you the first opportunity we have. ⁴⁷

The controversy between Rice and Simpson lasted throughout the time that Simpson remained in Minnesota. Its ramifications extended to almost every phase of the army engineer's work. Rice took up, and perhaps encouraged, not only Emerson's quarrel with Simpson, but also those of others with whom Simpson came into conflict. The lack of harmony between the two men undoubtedly influenced Rice to transfer the great share of requests for roads in Minnesota from the war department to the department of the interior after 1854, and it may have been a factor in the removal of Simpson from his Minnesota post in May, 1856.

47. Minnesota Democrat, September 5, 1855.



ROADS BUILT BY THE FEDERAL GOVERNMENT

III. THE EXPANSION OF THE GOVERNMENT ROAD SYSTEM

Throughout the period of difficult relations with the representative of the topographical engineers in Minnesota, Rice continued his efforts to obtain funds for the construction of roads. In 1855 he departed from the usual custom of seeking appropriations to be expended under the direction of the secretary of war, and began to work in part through the department of the interior. It may be that he grew tired of attempting to co-operate with the topographical engineers, with whom he had been embroiled continually since he came into office in 1853. There is no explanation for the change in the official records. In 1850, however, Rice had fulfilled a contract with the commissioner of Indian affairs, whereby he transported the Winnebago Indians, who were scattered over much of southwestern Wisconsin, northeastern Iowa, and southeastern Minnesota, to a new home in the Long Prairie region of central Minnesota. His relations with the department of the interior at that time had been so amicable that it seems reasonable to suppose that he hoped to find the department equally amenable in the matter of road building. ¹

1. Folwell, Minnesota, 1: 310-318.

A movement, begun in 1854, to provide a comprehensive system of roads throughout the settled regions of Minnesota did not get beyond the committee on roads and canals in the House that year. The bill asked for roads from Brownsville, by way of Winona, Minnesota City, Traverse des Sioux, and Fort Ridgely, to Sauk Rapids; from Fort Ridgely, by way of Lake Minnetonka and St. Anthony, to Taylor's Falls; from Minneapolis to Sauk Rapids; from the mouth of the Rum River to Mille Lacs; from Stillwater to Manomin; from St. Paul, by way of Little Canada, to White Bear Lake; and from Fort Ripley, by way of Crow Wing and the Chippewa agency, to the Red River. The bill was most comprehensive in scope, and, as one commentator declared, "It does not need much geographical knowledge of our Territory, to see how important all these roads are to Minnesota, and that if constructed they will add much to the value of Government lands in their vicinity." However true that may have been, the probability of obtaining this valuable network of roads was decreased greatly by the rapid growth of settlement during the middle fifties, which transformed the southern area from a wilderness into a region of farms. ²

2. Minnesota Democrat, March 15, 1854; Congressional Globe, 33 Congress, 2 session, 414, 486, 492, 697, 767, 773. The request for these roads originated in the territory itself. The legislature in 1854 adopted eight memorials to Congress pertaining to roads, and in 1855, five more. Laws, 1854, p. 152, 154, 159-161, 163-166, 170, 1855, p. 177-181, 185.

Rice was not discouraged by his failure to secure appropriations for these roads. It was at this point, however, that he shifted his ground. In February, 1855, the government negotiated a treaty at Washington with the Pillager and Mississippi River bands of Chippewa Indians to obtain the relinquishment of the Indian title to a huge body of wilderness land. In the terms of the treaty Rice caused to be included, among the "promises" for the Mississippi bands, a stipulation that the sum of \$5,000 be set aside for the construction of a road from the mouth of the Rum River to Mille Lacs, to be expended under the direction of the commissioner of Indian affairs. Among similar "promises" for the Pillager and Lake Winnibigoshish bands, the commissioner of Indian affairs received authority to expend \$15,000 for the construction of a road from Crow Wing to Leech Lake. Without any demur the treaty was ratified, and thus two more roads were provided for. Rice exultantly wrote to Emerson: "You will see that I am getting appropriations for roads where ever and whenever I can. On Monday next the Winnebagoes will sign a treaty, and then we will get another Road, if the Senate ratify the treaty." Unfortunately, Rice's hopes were not fulfilled, and the treaty with the Winnebago, negotiated on February 27, 1855, contains only the provision that the Indians should grant a right of way for roads through the lands on their new reservation in Blue Earth County if

and when roads were built. ³

In 1856 Congress passed a measure providing for the construction of a wagon road from "Fort Ridgley [sic] in the Territory of Minnesota, to the South Pass of the Rocky Mountains, in the Territory of Nebraska." It was a measure that was dear to American hearts, and one that had been advocated for a half dozen years. The earliest migrants to the gold fields of California and to the fertile valleys of the Pacific Northwest had trudged the weary miles across burning prairies, leaving their broken wagons, their discarded household goods, and, often, their bones to mark the way for those who came after them. There were no roads to the Pacific; there were only routes. The most used of these western trails was that which began at Independence, Missouri, followed up the valley of the Platte River, crossed the valley of the Great Salt Lake in Utah, and then continued across the endless mountains to the promised land.

In 1851 William H. Nobles, one of the gold seekers,

3. Statutes at Large, 10: 1167, 1168, 1172-1176; Minnesota Democrat, March 21, 1855; Folwell, Minnesota, 1: 306-308. Rice did not describe the route of the road for which he hoped to get appropriations when the Winnebago Indians signed the treaty. He persisted in the effort to provide a road through the agency, and in 1856 George W. Manypenny, the commissioner of Indian affairs, refused to recommend an appropriation for such a road. See Manypenny to Rice, April 15, 1856, in Interior Department Archives, Indian Office, Letter Books, 54: 91 (Calendar, 15250). A photostatic copy of this letter is in the possession of the Minnesota Historical Society.

looking for an easier route to the Pacific, discovered a pass which led, on a gradient much easier than that of the old trail, over the Rocky Mountains. For several years he tried without success to interest the government in this new route. In 1853 he came to Minnesota, and from this frontier outpost of civilization he continued his campaign. He discovered that the fringes of civilization in Minnesota were more than a hundred miles closer to the new pass over the mountains than were the frontier regions of Missouri. Through the press he argued that, since it was shorter by way of Minnesota, the route should begin there. Other advantages that he pointed out were that an abundance of wood and water could be found on the route, which was more than could be claimed for the trail up the Platte River; that the country was of the kind through which a road easily could be made, a fact which was pointed out in the report of Captain Reno who had that year made a survey of the government road from Mendota to the mouth of the Big Sioux River; and that the route ran more nearly east and west than any of the other transcontinental routes, thereby saving the traveler from the inconvenience and discomforts of changes in latitude. ⁴

4. Statutes at Large, 11: 27; ante, p. 65. The Minnesota Democrat for October 19, 1853, reprinted, from various California and New York papers, letters written by Nobles.

Minnesota visionaries saw in Nobles' plan a chance to make Minnesota the starting point for a great trans-continental route, and through the medium of the press sponsored his cause enthusiastically. The Minnesota Democrat, early in 1854, called on the people of Minnesota and the legislature to ask for an appropriation for a road to Fort Laramie where the old Independence trail would be joined, assuring its readers that little more was required than "to mark it out distinctly." The papers of Chicago and other western cities, it was claimed, were advocating this route, and it was up to the people of Minnesota to do something about it also. In response to this appeal, a meeting, attended by most of the influential men of the territory, was held in St. Paul on February 9, 1854. Judge Andrew G. Chatfield, associate justice of the territorial supreme court, presided, and Joseph R. Brown acted as secretary. The group appointed a committee to draw up resolutions to be presented to Congress urging the construction of the emigrant road, and delegated Nobles to go to Washington to work for the passage of the act, the sum of \$500 being voted for his expenses. In the enthusiasm that followed, the territorial legislature authorized the laying out of a territorial road from St. Paul, by way of Fort Ridgely, to the Missouri River "as near to old Fort aux Cedre as . . . expedient," and adopted a memorial to Congress praying for the appropriation

of funds for the construction of a military road from Minnesota to Oregon and California.⁵

More than two years passed before Congress could be induced to take up the subject seriously. The territorial legislature of 1856 again memorialized Congress for an emigrant route, reminding that body that Minnesota had already opened a road to the Missouri River, and it asked for an appropriation of \$20,000 for the construction of a road from there to the South Pass. Nobles, himself a member of the legislature, again packed his carpet bag and hurried to Washington to do some more lobbying for the road. On April 4 Representative Elihu B. Washburne of Illinois introduced the desired measure, providing for an appropriation of \$50,000 for the road which was to be constructed under the supervision of the department of the interior. Superficial objections to this appropriation were made on the ground that, although it was evidently a military road, its construction was not to be entrusted to the secretary of war. An amendment to place the construction of the road under the war department was defeated when it was decided that the authority to deal with the Indians, through whose lands the road was to pass, rested with the secretary of the interior. Senator Albert G. Brown of Mississippi refused to vote for the

5. Minnesota Democrat, January 11, February 15, 22, 1854; Laws, 1854, p. 45, 164.

bill unless he was assured of favorable action on a measure of his own to construct a road from Vicksburg to California by way of El Paso. That Nobles had been persistent in his efforts may be ascertained from the caustic remark of Senator Andrew P. Butler of South Carolina regarding this "appropriation to a man by the name of Nobles." The opposition to the measure was fleeting, however, and on July 22, 1856, it became a law. ⁶

The plan for opening the road to the Pacific included the construction of a road from Fort Ridgely to the Mississippi River. The Minnesota legislature, about the time that it memorialized Congress for the road to the South Pass, adopted another memorial asking for an appropriation of \$30,000 for the construction of a military road from Winona to Fort Ridgely. The route suggested was substantially the same as that named in the bill that Rice had presented in 1854. The House committee on military affairs referred the memorial to the war department, whose experts reported that such a road was not necessary nor directly useful for military purposes, thereby sounding the death knell of the effort to secure a connection between Winona and the frontier outpost. The legislature of 1856 presented

6. Laws, 1856, p. 347; Daily Pioneer and Democrat, December 8, 1855, March 6, July 7, 1856; Congressional Globe, 34 Congress, 1 session, 822, 1166, 1473, 1616, 1630-1632; Statutes at Large, 11: 27.

Congress with memorials for two other east and west roads -- one from Wabasha to Fort Ridgely and the other from Brownsville to the Mankato territorial road. Neither of these fared any better. ⁷

Perhaps there was an awakening realization in Minnesota of the fact that the territory was gradually growing up, and that, unless the favors of Congress were courted immediately, it would be too late to obtain the full benefits of its largess, for grants for roads scarcely could be expected after statehood was attained. At any rate, the legislature of Minnesota in 1856 and 1857 bombarded Congress with memorials asking for appropriations for roads. In the session of 1856, memorials were adopted for a road extending along the west bank of the Mississippi from Fort Snelling to Pembina -- there was a military road along the east bank as far as Crow Wing; for a road from St. Paul by way of White Bear Lake to Kettle River, which would intersect the military road from Point Douglas to Lake Superior; for the extension of the Mendota-Wabasha road to the Iowa line; and for a liberal appropriation for the construction of bridges and culverts on the road from Iowa, by way of Richland, Preston, and Chatfield, to Rochester,

7. Laws, 1856, p. 343, 351, 358; 34 Congress, 1 session, House Committee Reports, no. 191 (serial 868); Abert to Davis, April 2, 1856, in War Department Archives, Chief of Topographical Engineers to the Secretary of War, Letter Books, 2: 135 (Calendar, 457).

and on the road from St. Paul to Elliot, by way of Cannon Falls, Rochester, and Carimona. The legislature of 1857, faced with the imminent problems of statehood, contented itself with the adoption of only two memorials. One reiterated the need for a military road from St. Paul to Kettle River; the other introduced a demand for a road which was to cut across the territory from the far northeastern corner on Pigeon River, following the shore of Lake Superior to Fond du Lac, and thence leading westward to Fort Ripley. ⁸

There was little hope that anything could be accomplished in Congress in 1856, but Rice did what he could. The bill which he had introduced at that session to provide for bridging streams and opening roads in southern Minnesota he prosecuted to the best of his ability. When a member of the House asked who was officially endorsing this unusual bill -- unusual because it not only was extremely comprehensive, but also because it advocated roads that were not necessarily of a military nature -- Rice read into the record a letter from George W. Manypenny, commissioner of Indian affairs, for the war department had not been consulted. The bill provided for the appropriation of \$10,000 for the erection of bridges on the territorial road from St. Paul to Elliot, and \$5,000, each, for roads from

8. Laws, 1856, p. 355, 360, 367, 371, 373, 1857, regular session, 292, 294.

Shakopee to Le Sueur, from Kasota to the Winnebago agency in Blue Earth County, and from Faribault to Traverse des Sioux. The roads were to be built under the direction of the commissioner of Indian affairs. Rice was unable to get a vote on the measure before Congress adjourned, however, and it was not until January, 1857, that it passed the House. There still remained the Senate to convince, and when Senator Douglas submitted the measure for consideration, it was at once evident that that body felt that Minnesota already had received more than its share of Congressional appropriations for roads. At that time Congress was considering a statehood bill for Minnesota, and the opinion that it had "a population sufficient to support her own government and make her own improvements" was generally accepted. Moreover, that very day, March 3, Congress passed an act which gave Minnesota a magnificent grant of public lands to be used in the construction of railroads, and, in addition, the army appropriations bill, passed the day before, included an appropriation of more than \$50,000 for the completion of the military road system. These considerations, together with a hint of sectionalism and a charge that Douglas was favoring the northern territory, were sufficient to defeat the bill. 9

9. Congressional Globe, 34 Congress, 1 session, p. 1452, 1492-1494; Congressional Globe, 34 Congress,

While this final attempt to obtain federal funds for Minnesota roads was being made, the work of construction progressed steadily. On the roads that were assigned to the secretary of the interior, work was begun immediately after the ratification of the treaty with the Chippewa Indians. In April the commissioner of Indian affairs appointed William McAboy to take charge of opening the roads from Crow Wing to Leech Lake and from the mouth of the Rum River to Mille Lacs. By fall the roads, under McAboy's direction, were in passable condition. It was not until the summer of 1856, however, that they were completed and all contractors paid off. The contrast between the rapidity with which construction on these roads was being forwarded and the relatively slower rate at which the army engineers worked provided the editor of the Minnesota Democrat with a venomous dart to cast at Simpson and added fuel to the quarrel that flared in the fall of 1855. 10

3 session, 391, 399, 734, 987, 1046, 1110-1112, 1116; Statutes at Large, 11: 203, 204; Daily Pioneer and Democrat, July 10, 1856, February 4, March 20, 1857; Winona Republican, February 10, 1857.

10. Manypenny to Willis A. Gorman, April 3, 1855, Manypenny to McAboy, April 19, 1855, June 26, August 6, 1856, C. E. Mix to Gorman, June 28, 1855, Manypenny to Rice, February 19, 1856, Manypenny to Francis Huebschmann, July 8, 1856, in Interior Department Archives, Indian Office, Letter Books, 51: 200, 287-289, 54: 401, 55: 22, 52: 89, 53: 402, 54: 443 (Calendar, 14730, 14763, 15339, 15394, 14892, 15164, 15357); Minnesota Democrat, July 4, 1855. The Minnesota Historical Society has photostatic copies of the letters of April 19 and June 28, 1855, and February 19 and July 8, 1856.

As soon as the funds for the construction of the road from Fort Ridgely to the South Pass of the Rocky Mountains was available, Manypenny began to organize the staff necessary to carry on the work. In recognition of his work in pushing the bill through Congress and because of his wide knowledge of the country through which the road was to pass, Colonel Nobles was appointed superintendent of construction for the eastern half. He began a preliminary survey of the route that fall, getting a better idea of the country over which the road was to pass and erecting storehouses for supplies. The following spring, after many exasperating delays, Nobles' expedition got under way. A minimum amount of construction work was done on the road and it was graded only where it was absolutely necessary to do so; nevertheless, the appropriation was exhausted by the time the expedition reached the Missouri River. Nobles estimated that it would take an additional \$300,000 to complete the emigrant wagon road. 11

11. Manypenny to Nobles, September 18, 1856, in Interior Department Archives, Indian Office, Letter Books, 55: 105-107 (Calendar, 15435); Jacob Thompson to Nobles, April 25, 1857, in Interior Department Archives, Wagon Roads, Letter Books, 1: 3-6 (Calendar, 3). The Minnesota Historical Society has photostatic copies of these letters. See also Daily Pioneer and Democrat, October 4, November 18, December 17, 1856, April 30, May 21, June 14, 16, 17, 21, July 12, 29, September 26, November 5, 1857; report of Manypenny to the secretary of the interior, November 22, 1856, in 34 Congress, 3 session, Senate Executive Documents, no. 5, p. 570 (serial 875); report of Nobles to the secretary of

The exhaustion of the appropriation allotted to the eastern portion of the road halted the work. Although Nobles complied with instructions to economize on the amount of construction work done, his expenditures for supplies and equipment laid him open to a charge of extravagance. He apparently believed an additional appropriation would be made by Congress to carry on the work when the initial appropriation was exhausted. At the end of the season of 1857 his accounts were in arrears to the extent of \$10,000, and, as a result, he was suspended from his position. McAboy was appointed to take his place, but he failed to take up the duties, and in February, 1858, Nobles was reinstated. Early in the spring he began to reorganize his staff, but on June 17, 1858, he was informed that, since no appropriation had been made by Congress, he should, in co-operation with the Indian agents in the vicinity, appraise the government property still in his possession, preparatory to closing his accounts. Perhaps Nobles still hoped that an appropriation would be obtained. At any rate, he delayed in complying with the instructions of the secretary of the interior so long that sharp disciplinary measures had to be resorted to. In the end he resigned, but the discrepancy in his accounts re-

the interior, January 18, 1858, in 35 Congress, 2 session, Senate Executive Documents, no. 36, p. 13-16 (serial 984).

mained unrectified. In 1861 the government obtained a judgment against him to the extent of \$3,446 and costs. ¹²

The interest aroused in Minnesota in the late fifties by this road to the Pacific paralleled that displayed in Minnesota in 1853, when Governor Isaac I. Stevens made his famous expedition to Puget Sound. Governor Stevens, however, was primarily interested in discovering a route for a proposed northern transcontinental railroad from Lake Superior to Puget Sound. That he found a practicable wagon route was more or less incidental to the purpose of his trip. The route favored in the Stevens report was that later adopted by the Northern Pacific Railroad. That of the Fort Ridgely-South Pass wagon road angled to the southwest. It is significant, however, that the latter road, al-

12. Thompson to Nobles, June 2, 3, 22, August 8, October 30, December 14, 1857, February 4, June 17, August 25, 1858, Thompson to M. W. Irwin, June 22, 1857, Thompson to McAboy, October 20, 30, 1857, February 3, 1858, Campbell to McAboy, October 30, November 30, 1857, in Interior Department Archives, Wagon Roads, Letter Books, 1: 37, 39, 52-54, 81-83, 102, 114, 129, 171, 182, 54, 99, 100, 128, 100, 109 (Calendar, 12, 14, 25, 30, 42, 47, 55, 74, 76, 26, 37, 40, 54, 39, 44). The Minnesota Historical Society has copies of the letters of June 22 (Thompson to Nobles) and August 8, 1857, and June 17, 1858. See also Daily Pioneer and Democrat, April 23, May 21, June 9, 1858. The documents relating to the investigation of Nobles and the judgment against him may be found in the Interior Department Archives, Wagon Roads, Letter Books, 1: 182-203 (Calendar, 77-89). See also Kelly to Junius Hillyer, January 21, 1861, in Interior Department Archives, Wagon Roads, Letter Books, 1: 284 (Calendar, 92). A photostatic copy of the latter letter is in the possession of the Minnesota Historical Society.

though it originally was intended for a wagon road, was built with the idea in mind of "its ultimate adaptability for the route of the 'Pacific Railroad.'" 13

The roads built under the auspices of the secretary of the interior formed but a small part of the total number built in Minnesota by the federal government. On the comprehensive network of roads over which the topographical engineers had supervision, progress was made slowly and without spectacular display. Federal funds for their construction were appropriated in 1855, 1856, and again in 1857. The appropriations of 1855 were supposedly sufficient for their completion; yet as long as the army engineers were in Minnesota they annually requested additional funds for the completion of the roads. The repetition of these requests may be accounted for in part by the changing personnel of the army engineers in charge of the work, for each of them had a different concept of what was needed to complete the roads. Simpson was removed from the Minnesota post in May, 1856. He was succeeded by Captain George Thom, who remained in the territory until May,

13. Stevens to Sibley, April 17, June 7, 15, 1853, in Sibley Papers; Minnesota Pioneer, February 23, March 9, 30, April 13, 1854; Stevens, Report of Explorations for a Route for the Pacific Railroad, 87-95, 141-143, 222-226, 352-358 (33 Congress, 2 session, House Executive Documents, no. 91 -- serial 791); report of Samuel Medary to Nobles, December, 1857, in 35 Congress, 2 session, Senate Executive Documents, no. 36, p. 23 (serial 984).

1858. Thom in turn was replaced by Captain Howard Stansbury, who remained in charge of road making in Minnesota until 1861. When he was recalled, the comprehensive program of road making in Minnesota, which the federal government had begun in 1850, came to a halt, and the burden of maintaining the roads it had constructed was taken over by the communities through which they passed. ¹⁴

It is probable that at least a portion of the funds requested after 1855 was used for maintenance and repair purposes. Bridges frequently were washed out in the spring freshets and had to be replaced. It sometimes was discovered, after a road had been laid out, that a better route existed elsewhere. When such discoveries were made, the route was changed if it was possible to do so. Additional work often had to be done because of skimping or carelessness on the part of the contractors, which was not immediately apparent, but which showed up after the road had been subjected to the hard frosts of a northern winter. It sometimes happened, too, that the engineers found that their own specifications had been insufficient to insure the con-

14. Abert to Thom, May 7, 1856, Hartman Bache to Stansbury, October 23, 1861, in War Department Archives, Topographical Engineers, Letter Books, 20: 70, 23: 164 (Calendar, 3447, 4028); Thom to Abert, June 23, 1856, May 31, 1858, Simpson to Abert, June 24, 1856, in War Department Archives, Topographical Engineers, Letters Received (Calendar, 4094, 4199, 3952). The Minnesota Historical Society has photostatic copies of the letters of June 23, 1856, and October 23, 1861. See also the St. Anthony Express, May 24, 1856.

struction of a good road.

The appropriation of 1857 was the last made specifically for military roads in the territory of Minnesota. That year, appropriations totaling about \$38,000 were made for use on the roads from Point Douglas to the St. Louis River, from Point Douglas to Fort Ripley, and from Mendota to Wabasha. With these funds and some unexpended balances remaining from former appropriations, Captain Thom found that he had at his disposal about \$44,500. In his annual report for 1857, however, he estimated that in addition to that sum, the amount of money necessary to complete the roads already authorized or under construction was more than \$100,000. The funds he had were sufficient, he believed, to complete the roads from Point Douglas to Fort Ripley, from Wabasha to Mendota, and from St. Anthony to Fort Ridgely. He reported that it would cost \$45,200 to complete the road to Lake Superior, \$36,000 to finish the Mendota-Big Sioux road, and \$25,000 to make a good road from Fort Ripley to the Red River. Only one road, that from Swan River to Long Prairie, was completed.

The actual condition of the roads was not all that the territorial settlers hoped for. Thom reported that on the road to Fort Ripley there were several sections that had yet to be built, including one of twelve miles between St. Paul and Point Douglas, and that the bridge over the Rum River at Anoka had to be repaired. In

general, however, this road was in better condition than the other government roads in the territory, with the exception of that from Mendota to Wabasha, where the principal task remaining to be done was that of repairing the bridge over the Cannon River. Thom had estimated in 1856 that \$3,000 would be necessary for this work, but only \$2,000 had been appropriated. In order to get the work done, the commissioners of Goodhue County contracted to repair the bridge, assuming for the county any costs above \$2,000.

The Mendota-Big Sioux road was practically completed from Mendota to a point just beyond Mankato, except for the corduroying of a section near Mankato. Thom reported that even the best portion of the road, however, was but barely passable. On the last 178 miles, from Mankato to the mouth of the Big Sioux River, no work whatever had been done. The part of the federal government in making the road from St. Anthony Falls to Fort Ridgely was restricted to cutting out the timber on the route. The appropriation was not used for almost two years after it was made available, because the commissioners appointed by the territorial legislature to lay out the road were unable to decide on a route, several of which were recommended. The Henderson route finally was selected, and in July, 1857, contracts were let for the removal of the timber,

the work being finished that fall. 15

The appropriation for the road from Crow Wing to the Red River road -- a distance of about 160 miles -- had been withheld because the language of the bill granting the money required its expenditure upon a route which all who knew the country agreed was impractical. Until the bill could be amended so as to allow the use of the money upon a practicable route, no action was taken. Such an amendment was passed by Congress in 1857, and work was begun that year. The appropriation was for only \$10,000, however, and it was apparent to Thom that at least \$25,000 more would be needed to complete this important road between the Mississippi and Red rivers. 16

It was on the road to Lake Superior, however, that the situation was worst. Up to 1857 the federal government had appropriated more than \$120,000 for its construction. Parts of the road were represented as impassable even in the driest season of the year for any but "foot or horseback passengers." Corduroying, ditching, and grading were required over almost its whole length, and numerous bridges had to be built, rebuilt, or repaired.

15. Report of Thom to Abert, September 5, 1857, in 35 Congress, 1 session, Senate Executive Documents, no. 11, p. 348-355 (serial 920).

16. See ante, p. 72; Statutes at Large, 11: 204; Report of Thom to Abert, September 5, 1857, in 35 Congress, 1 session, Senate Executive Documents, no. 11, p. 354 (serial 920).

Nevertheless, Thom hoped to make a passable winter road of it that year. The settlers at the head of the lake long before this had grown impatient with the delay in opening the road. In 1854 they opened a winter stage road from Fond du Lac to a point on the St. Croix River near the mouth of the Yellow River. There it connected with an old lumbering trail which led to Taylor's Falls and the military road. Their temporary road did much to relieve their isolation during the winter, but only the completion of the government road, or the construction of a railroad, would solve their communication problems. There was little immediate hope of obtaining a railroad, however, and the government road was far from complete. Indeed, for all practical purposes, it was in useable condition only from Point Douglas to Taylor's Falls. 17

When Captain Stansbury came to Minnesota, he concentrated his efforts on these two roads. During 1858 he used up the balance of the appropriation of 1857, but there had been enough money only for the completion of the portion of the Lake Superior road from Point Douglas to Kettle River. Work on the Red River road

17. Report of Thom to Abert, September 5, 1857, in 35 Congress, 1 session, Senate Executive Documents, no. 11, p. 349-352 (serial 920); Minnesota Pioneer, February 2, 9, 1854; Daily Minnesota Pioneer, April 16, 1855; Weekly Minnesotian, February 18, 1854; Daily Minnesotian, November 17, 20, December 1, 5, 1854, January 11, 1855.

likewise was restricted by the depletion of funds. He made a complete survey of the road as far as Otter Tail Lake, however, and a reconnaissance from there to the Red River. He recommended that the route of the road be changed so that Fort Abercrombie, almost directly west of Otter Tail Lake, would have a direct road to Fort Ripley. The original appropriation bill required that the road be built to the Red River near the mouth of the Wild Rice River, far to the north. The funds he had were sufficient to build twenty-nine miles of road from Fort Ripley up the valley of the Crow Wing River to what was known as the Grand Marais. ¹⁸

With the exhaustion of federal funds, road building in Minnesota by the federal government came to a standstill. Yet, the bureau of topographical engineers retained an officer in Minnesota for nearly two years after all funds were gone, partly in anticipation of future appropriations for roads, but mostly to provide for the custody of the vast amount of federal property which had accumulated over a period of ten years. Then, too, there was a good deal of clerical work that had to be done, including the preparation of an adequate series of maps of the roads already done or contemplated. It was to this end that the officers directed

18. Statutes at Large, 11: 203; report of Stansbury to Abert, October 15, 1858, in 35 Congress, 2 session, Senate Executive Documents, no. 1, p. 1193-1202 (serial 976).

their efforts during their inactive years in Minnesota. On June 13, 1861, Stansbury was ordered to Columbus, Ohio, as a mustering officer. He disposed of the balance of the public property in Minnesota and closed the office. 19

Some activity on the part of the federal government continued after the withdrawal of the topographical engineers. During the Sioux uprising of 1862 and the years immediately following, the federal government maintained a considerable force in Minnesota to ward off any recurrence of the rebellion of the Indians. During this period the army participated in a minor degree in the road-building program of the frontier. The troops quartered at Fort Ripley, for example, repaired the roads in their vicinity and built bridges over many of the streams during the spring of 1864. The counties and individual citizens furnished the materials, and the army furnished the labor, with the result that much work was done which the harried frontier could not have performed under the circumstances. 20

The federal government returned to a policy of

19. Report of Stansbury to Abert, September 30, 1859, in 36 Congress, 1 session, Senate Executive Documents, no. 2, p. 857-866 (serial 1025); report of Stansbury to Abert, November 5, 1860, in 36 Congress, 2 session, Senate Executive Documents, no. 1, p. 532-540 (serial 1079); report of Stansbury to Bache, October 22, 1861, in 37 Congress, 2 session, Senate Executive Documents, no. 1, p. 546 (serial 1118).

20. St. Cloud Democrat, April 14, 1864.

making specific appropriations for roads in Minnesota in 1869 when the sum of \$10,000 was obtained through the efforts of Senator Alexander Ramsey for the construction of a military road from Duluth to the reservation of the Bois Fort band of Chippewa Indians at Nett Lake, far in the interior. The proposed road was to lead northward to Vermillion Lake, and thence westward to Nett Lake. Although the route was somewhat roundabout the reasons for its selection were obvious. In 1865 the reported discovery of gold had led to a stampede into the Vermillion Lake country, in the course of which a rough road was opened from Duluth by volunteer workers. In 1868 the state legislature appropriated funds for improving the road. The government road, by following the route of the earlier one, would save in construction costs, and at the same time, would improve the Vermillion Lake trail. Well-meaning Duluth citizens had a further interest in the opening of this road. The Canadian government about this time was opening the Dawson route, a land-water route leading from the Red River to Lake Superior, which was established in order to divert to Canadian merchants the lucrative trade of the Red River country. Duluthians hoped that the road to Nett Lake could be extended to the Rainy River, so that the Canadian trade might be intercepted and sent to Duluth. They argued that the Vermillion Lake route would be shorter and less laborious than the proposed

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land-water route which involved numerous portages between Rainy Lake and Lake Superior. 21

By the end of the summer of 1869 the government engineers had built the road as far as Vermilion Lake, and had bridged all streams. A reconnaissance was made of the route between Vermilion Lake and Nett Lake, but the engineer in charge of the road found the difficulties of construction so great that there would be no possibility of completing the road within the limits of the appropriation. For this reason, the work on the portion beyond Vermilion Lake was postponed, never to be resumed, in spite of the fact that a small amount of the appropriation remained at the end of the year. The real purpose of the construction of the road was accomplished, however, for a passable wagon road had been opened as far as the "gold country." 22

The war department acted as the agent of the federal government in one more important public work before the program of road construction begun in 1850 was culminated. From the time James M. Goodhue came to Minne-

21. See post, p. 183-185; Statutes at Large, 15: 318; S. J. Dawson, Report on the Line of Route between Lake Superior and the Red River Settlement (Ottawa, 1869); Duluth Minnesotian, July 10, 17, 1869.

22. George H. Primmer, "Pioneer Roads Centering at Duluth," in Minnesota History, 16: 294-297 (September, 1935); Duluth Minnesotian, July 10, 17, September 11, December 11, 1869; report of the commissioner of Indian affairs to the secretary of the interior, November 15, 1871, in 42 Congress, 2 session, House Executive Documents, no. 1, part 5, p. 1014-1016 (serial 1505).

sota, he had pleaded for a bridge across the Mississippi River at Fort Snelling, and his followers kept the idea alive. It was not until 1880, however, that the bridge was built. In 1876 the legislature authorized the construction of a free bridge at the end of the Fort Street road, and appointed three commissioners with authority to make all necessary contracts. Anticipating aid from sources other than the state of Minnesota, the legislators authorized the commissioners to receive any funds that were offered to them to aid in the construction of the bridge. When completed, it was to be maintained by Ramsey County. In 1878 the law was amended by increasing the number of commissioners to five, and, to guarantee unimpeded navigation of the river, a clause was added specifying that the spans of the bridge had to be one hundred feet long. That same year the federal government appropriated \$65,000 to assist in building the important link in the line of communication between Fort Snelling and the capital of the state, to be paid only when the bridge was completed and accepted by the secretary of war. The federal government insisted that the bridge be built with "stone abutments, or stone and iron abutments, and iron superstructure," that the floor of the bridge be at least sixty-eight feet above the high water mark, and that the span nearest Fort Snelling be two hundred feet long. With the assurance that federal aid would be forthcoming, construction on the bridge was

begun at once. By February, 1880, it was so nearly completed that the Old Settlers' Association of St. Paul was able to make an inspection tour over it. On March 19, 1880, Alexander Ramsey, then secretary of war, made a formal inspection and accepted the work, the money was turned over to the commissioners, and, with appropriate ceremonies, the bridge was "irrevocably dedicated to the public, and free to the United States, and all the people thereof." 23

The federal government furnished funds for the construction of other roads in Minnesota during the period following the end of the Civil War, all of which were built to improve the means of communication for the Indian agencies. In the construction of these roads, the department of the interior acted as the agent for the government. In a treaty with the Chippewa Indians, in the summer of 1863, the government agreed to spend \$5,000 for cutting out a road from Leech Lake to Red Lake, where a new agency was to be located. In another treaty with the Chippewa negotiated the next year, the government promised to spend \$7,500 more for the same

23. See post, p. 134; Special Laws, 1876, p. 209, 1878, p. 348; Statutes at Large, 20: 224; St. Paul Pioneer Press, February 5, March 20, 1880; Statement of Appropriations and Expenditures for Public Buildings, Rivers and Harbors, Forts, Arsenals, Armories, and Other Public Works, from March 4, 1789, to June 30, 1882, p. 327 (47 Congress, 1 session, Senate Executive Documents, no. 196 -- serial 1992). The Fort Street road is present-day West Seventh Street in St. Paul.

purpose. Accordingly, appropriations were made during the sessions of 1864 and 1865, and the agent was allowed to begin work on the road. In 1867 the White Earth Indian Reservation for the Chippewa was created, and the process of removing the different bands was begun shortly thereafter. To facilitate the work, the agent in 1869 asked for an appropriation for a road from Leech Lake to White Earth. During the following year he opened "a good wagon road, practicable at all seasons, westward from Leech Lake to White Earth, a distance of 80 miles." The completion of the Northern Pacific Railroad to the Red River Valley made Detroit the closest point on the railroad for both the White Earth and Red Lake reservations, and the need for opening a road to that point was imperative. The agent at Red Lake claimed in 1871 that the only existing road to the railroad was a hundred and fifty miles long, and "the worst in the state." The proposed road, he averred, would shorten the distance to the railroad by fifty miles, and save thirty dollars per ton in freight charges. In 1873 Congress included in the deficiency appropriation bill the sum of \$5,000 for such a road, and the following year, \$10,000 more was made available. With this money "a very fair wagon-road, with the necessary bridges," was constructed by the end of 1875. The appropriations, in fact, had been unusually generous, and an unspent

balance of \$5,000 was returned to the treasury. 24

The roads built by the federal government differed as widely as the purposes they served. Some were simply temporary trails through the wilderness, and others were so designed that they became arterial highways for the region through which they were built. In general, the roads built by the interior department were constructed solely to facilitate the business of the government. On the other hand, those built by the army engineers were designed for a dual purpose: that of facilitating the transaction of government business, and that of opening and constructing "the great thoroughfares sufficiently to answer the wants of the people until they erect themselves into a State, or, at any rate, until they are populous enough and efficient enough to make and

24. Statutes at Large, 13: 44, 86, 165, 561, 16: 719-723, 17: 538, 18: 173; reports of the commissioner of Indian affairs to the secretary of the interior, October 22, 1866, in 39 Congress, 2 session, House Executive Documents, no. 1, p. 296 (serial 1284), December 23, 1869, in 41 Congress, 2 session, House Executive Documents, no. 1, part 3, p. 480 (serial 1414), October 31, 1870, in 41 Congress, 3 session, House Executive Documents, no. 1, part 4, p. 771 (serial 1449), November 15, 1871, in 42 Congress, 2 session, House Executive Documents, no. 1, part 5, p. 1009 (serial 1505), November 1, 1874, in 43 Congress, 2 session, House Executive Documents, no. 1, part 5, p. 506 (serial 1639), November 1, 1875, in 44 Congress, 1 session, House Executive Documents, no. 1, part 5, p. 799 (serial 1680); Edward P. Smith, United States Indian agent at the Chippewa agency, to the commissioner of Indian affairs, January 16, 1872, in 42 Congress, 2 session, House Executive Documents, no. 130, p. 3 (serial 1513); Detroit Record, July 20, 1872, March 8, June 7, 1873, October 3, 1874.

foster their roads themselves." That was Simpson's view of what was important in constructing military roads in Minnesota when he replied, in his annual report to Colonel Abert in 1855, to the question of how far the government should go in building roads on the frontier. To make roads of this sort, he continued, in dense woods the trees should be felled for at least sixty-six feet, and in some cases one hundred feet, not only to let the sun and wind dry the road, but also "to prevent fallen trees from obstructing the road." Where the trees were less abundant and lower in height, he thought a width of thirty-three feet was sufficient. The road bed, in Simpson's opinion, should be not less than twenty-five, nor more than thirty-three feet wide, and should be entirely cleared of stumps, brush, and stones. All small holes should be filled and hummocks leveled off. No grade should exceed a ten foot rise in a hundred feet, and if possible it should not be greater than eight per cent. For soft or marshy ground, he recommended corduroyed roads, with the "logs thoroughly covered with suitable gravel or earth." He believed in adequate ditching at all times to insure drainage for the roads. The bridges and culverts that Simpson built were made of logs and heavy planking, partly because such bridges were adequate for frontier conditions, but also because the material for their construction could be obtained

cheaply on the frontier. 25

The cost of building such roads varied with the difficulty of the work and the bidding of the contractors. Simpson early devised a system of contracting whereby each type of work was contracted for at a specified rate. This was somewhat of a revolutionary procedure, for most army men simply contracted for the work at a specified rate per mile. Simpson's plan undoubtedly insured greater efficiency and honesty, for payment was made on the basis of the amount of work done, and no contractor could make a claim for additional compensation on the ground that the work proved more expensive than it had appeared upon first inspection. 26

In contrast with the roads built by Simpson were those constructed by the government under the supervision of the secretary of the interior. No adequate descriptions of the roads built by McAboy from Crow Wing to Leech Lake and from Anoka to Mille Lacs have been found. Descriptions of the kind of work performed on the Fort Ridgely-South Pass road, however, are found in the reports of Colonel Nobles and his assistants. Nobles

25. Report of Simpson to Abert, September 20, 1855, in 34 Congress, 1 session, Senate Executive Documents, no. 1, p. 483-485 (serial 811).

26. Report of Simpson to Abert, September 20, 1855, in 34 Congress, 1 session, Senate Executive Documents, no. 1, p. 494 (serial 811). Payment for accepted work was made monthly, but ten per cent of the contract price was withheld and was paid if the contract was completed within the specified time.

was trying, not to build a road, but to open a route. Bridging, for example, was omitted wherever possible, only two bridges being deemed necessary on the entire route. Over other streams, crossings were made by fords, or, as in the case of the Minnesota River at Fort Ridgely, by ferries. When necessary, the bottoms of the streams at the fording places were paved with boulders upon which gravel was placed. Nobles stated that there were but two or three hills along the route that presented obstacles, and those he had graded, "so that the ascent and descent will be easily accomplished." On those portions where the ground was marshy, rough corduroy roads were constructed if wood was available. Otherwise, a solid bottom was made by filling in the sloughs and swamps with grass or brush. The most laborious part of opening this road, one of the party explained, lay in the construction of mounds to mark the route. These mounds, from three to five feet in height, were placed along the side of the road "at intervals of a quarter and half mile, and nearer together, wherever it is deemed necessary." 27

The early road makers in Minnesota were not often troubled, as were those who followed them, by the neces-

27. Report of Nobles to the secretary of the interior, January 18, 1858, and accompanying reports, in 35 Congress, 2 session, Senate Executive Documents, no. 36, p. 13-29 (serial 984); Daily Pioneer and Democrat, July 12, September 26, 1857.

sity for following section lines, or by the legal technicalities which accompanied negotiations for acquiring a right of way. Most of the land was still in the hands of the government, but such private owners as there were usually recognized the advantage of having the road pass through their lands and willingly granted a right of way. Therefore the military roads were able to follow the best possible routes through the country they traversed. In this way, grades and costs of construction could be greatly reduced.

Minnesota appears to have profited more in grants of money for roads than most of her sister states. Appropriations for the eight roads constructed directly under the supervision of the secretary of war totaled something over \$312,500, and an additional sum of \$67,000 was granted to aid in the construction of bridges, the payment of which was dependent upon the approval of the structures by the war department. In addition to these appropriations, the secretary of the interior controlled the expenditure of \$87,500 on six roads, the construction of which that department supervised. The total of direct appropriations for road and bridge construction in the territory and state was about \$467,000, an amount which exceeded the combined total for Wisconsin and Iowa. According to a report prepared by the secretary of the treasury in 1882, Wisconsin received grants of money totaling only \$69,000 for

roads, and Iowa, a total of \$70,500. The former state, however, received a grant in excess of \$225,000 to aid in constructing the Milwaukee and Rock River Canal. Including this item, however, the combined total is still considerably smaller than the sum of the direct appropriations for Minnesota. Michigan, with a total of about \$400,000 in appropriations for roads, most closely approaches the Minnesota figure. 28

Perhaps one of the factors in Minnesota's good fortune in obtaining assistance from the federal government in building roads was the quality of her representation in Congress. There is no question but that Sibley and Rice, and Ramsey after them, were characterized not only by their desire to serve the interests of the frontier territory and state, but by their ability as well. Furthermore, in the halls of Congress throughout the

28. Statement of Appropriations, 304-307, 323, 327, 335-340. The appropriations for Minnesota roads totaled exactly \$467,220.93. The tabulation of appropriations is marred by frequent errors, but it is useful. Montana, for example, is charged with an appropriation of \$10,000 for the Fort Ripley-Red River road (p. 309). Minnesota is charged with the full appropriation for the military road proposed to be constructed along the western frontier in 1836 (p. 304), although no portion of the route lying in Minnesota was constructed. See ante, p. 29. On page 322 there is a statement of appropriations for a road from Fort Ripley to Bridger's Pass in the Rocky Mountains, authorized March 3, 1855. This should read "Fort Riley." See Statutes at Large, 10: 641. With the exception of the Fort Ridgely-South Pass wagon road (p. 306), and the Red Lake-Northern Pacific road authorized in 1873 and 1874 (p. 323), none of the roads constructed under the supervision of the secretary of the interior is mentioned.

territorial period, Minnesota's warm friend was that dynamic apostle of frontier squatter sovereignty, Stephen A. Douglas, and, during that period, he was at the height of his power. Minnesota grew up during that period in American history characterized by the lavish gifts which Congress made in money and land to encourage internal improvements. Minnesota had little occasion to profit from grants of land or money for the construction of inland waterways, and the era of grants of land for the encouragement of railroad construction was just beginning. It was Henry M. Rice who pointed out that the territory could not build roads through Indian land, and that, furthermore, men going to the frontier were too poor to build them. "While they are standing there with a hoe in one hand and a rifle in the other," they could not be expected to make roads. "Is it just that the people of a Territory should construct roads for the benefit of the General Government and non-residents?" Sibley previously had pointed out that the best interests of the nation itself would be served if it opened the roads into the wilderness so that the federal lands might be sold more rapidly. These arguments may have had some effect upon the members of Congress. Certainly, as Minnesota grew to maturity, Congress was almost extravagant in her gifts. On the day that the territory attained statehood, Congress bestowed upon her a gift

of lands for railroads and other internal improvements, and promised that, so long as there were public lands to be sold, the nation would give the new state five per cent of the proceeds for internal improvements. 29

29. See ante, p. 49; post, 309, 311-318; Congressional Globe, 34 Congress, 1 session, p. 1493.

IV. THE ROADS OF THE TERRITORIAL PIONEERS

Resourcefulness and initiative have been the main reliance of the people on the fringes of civilization throughout American history. A far-off federal government might make efforts to protect these strays from the fold from the depredations of Indians, and it might appropriate funds from the federal treasury to help them to build their statehouses, their roads, and indeed, to pay the expenses of their government. But in the end, the determining factor in the erection of an American commonwealth on the outskirts of the United States has been their ability to adapt to their needs the implements which they found at hand. It was so in Minnesota. While the frontier territory was not averse to accepting all that it could get from the federal government, and while it kept asking for more federal assistance for its government, its buildings, and its roads, yet the frontiersmen realized that all that the federal government might do was but a small fraction of what had to be done.

The physical part of the road system of territorial Minnesota had little from the past upon which to draw. A few straggling wagon trails in the St. Croix Valley, the warpaths of the barbaric Indians, the cart

tracks of the fur traders, and game trails over prairies and through forests -- these constituted the physical heritage of the pioneers. They had to start from the beginning to mark out roads on the prairies, to chop out trails through the forests, to build up causeways over the miry soil of the swamps. Their road system was an ever changing one. It grew as the territory grew, expanded as the needs of an ever increasing population increased. When the end of the territorial period approached, the road system was still far from being completely outlined, for much of Minnesota had yet to be conquered by the white pioneer. Always the story was the same. On the frontier the pioneers cut out rough trails; their brethren in slightly more settled communities improved these trails; and the inhabitants of the still older areas re-routed the roads along section lines, cut down unseemly grades, and built better bridges than the makeshifts which the pioneers had thrown across streams.

Throughout the territorial period, the legislature acted as guide and co-ordinator for the pioneers. The frontier settlements were generally isolated islands in the midst of a wilderness, and one of the chief causes for discontent in such communities was their loneliness. If they were located on navigable rivers, their isolation was rendered less acute during the summer months by the more or less regular calls of

the steamboats which plied the upper Mississippi River and its tributary streams. During the winter months and periods of extreme drouth, however, they were entirely cut off from intercourse with one another and with the outside world. It is not surprising, therefore, that they clamored for a means of communication that would be satisfactory at all seasons of the year. The editor of one territorial newspaper pleaded, "Roads are the veins and arteries of a state -- as essential to its existence as are the same organs to the animal system. They are the avenues thro' which must flow the enterprise and activity of its citizens, the life blood of its physical system." ¹

It was the duty of the territorial government to see that these channels carried the trade and commerce of the scattered frontier communities in an unobstructed flow. The isolated settlements all too often were incapable of seeing that their well-being was bound up with that of rival towns, and it was the duty of the territorial government to make sure that, in the opening of roads which extended through more than one county, the best interests of all the communities involved were served. Thus, the territorial government could order, upon petition, the opening of a route through two or more counties and could insure its continuity.

1. St. Anthony Express, December 17, 1853.

This power, however, was conditioned by the proviso that the petition for a road had to be signed by twelve householders in each county through which it was to pass, and that they had to live in the vicinity of the proposed road. The function of the territorial government was an important one, for it served to co-ordinate the actions of the counties and, when the general good of the people demanded it, to supplement them.

The population of Minnesota grew slowly during the first few years. The census of 1850 listed 6,077 inhabitants; in 1854 it was estimated that there were about 32,000 persons residing in the territory. The increase, however, consisted mostly of accretions to the population of the main centers, such as St. Paul, St. Anthony, and Stillwater. But during those years the foundations were being laid for a great increase in population that was to take place in the last years of the territorial period. In 1851 treaties were negotiated at Traverse des Sioux and Mendota which resulted in the cession by the Indians of their claims to a vast area of Minnesota west of the Mississippi River. The treaties were ratified in the summer of 1852, and early in 1853 steps were taken to survey the land for disposal to settlers. The ratification of the treaties and the glowing descriptions of the region that were published in Minnesota newspapers centered a flood light of publicity upon the Minnesota scene. The most spectacular

manifestation of the results of this publicity was the famous railroad excursion of 1854, which celebrated the opening of a rail link to the banks of the Mississippi River. The journey included an inspection of the railroad and a boat trip up the Mississippi River to St. Paul. Many important political and literary figures made the pilgrimage to the frontier, and their reports heightened a growing interest in Minnesota and the Northwest among the people in the older states. Although the early years of the fifties were relatively quiet, they were spent in making ready for the influx of settlers which all Minnesota enthusiasts were sure would come when the possibilities of the new frontier were known. Squatters encroached on the unsurveyed lands in the country which so recently had been Indian lands, and townsite boomers laid out towns and got ready to advertise the sale of lots. Those who reached the ground first sought to entrench themselves so as to profit from the boom when it came. ²

The quiet growth of Minnesota during the early fifties was also characteristic of the development of the road system. The roads which the federal government had begun to build, while primarily intended for military purposes, were of great utility to the settlers. Locally, the counties widened the areas reached

2. Folwell, Minnesota, 1: 275-288, 352, 358, 360.

by their roads, and in the absence of a great need for a comprehensive system of roads, there was little activity on the part of the territorial government. The legislature of 1849 authorized the opening of five territorial roads, all of which were within the limits of the settled area. One of them extended from Stillwater, by way of White Bear Lake, to the mouth of the Rum River. Two roads from Point Douglas to St. Paul were ordered opened: one of them by way of Cottage Grove, and the other by way of Red Rock and Pig's Eye. A fourth road followed the east bank of the Mississippi River from the mouth of the Rum River to Crow Wing, and the fifth one connected St. Paul and the settlement of Little Canada. A charter permitting Franklin Steele to operate a ferry across the Mississippi at St. Anthony Falls was also granted. ³ The legislature in 1851 was constrained by St. Anthony interests to open a road from St. Anthony to Willow River, Wisconsin. The road was to cross the St. Paul-Stillwater road where John Morgan had erected his Halfway House, and was to gain access to Willow River by means of the ferry across St. Croix Lake which the Wisconsin legislature in 1848 had authorized William H. Nobles to establish. ⁴

3. Laws, 1849, p. 96, 97, 98, 105. The Minnesota Chronicle and Register of St. Paul for December 22, 1849, noted that the roads had been laid out.

4. Laws, 1851, p. 27. Morgan's tavern was located about half way between St. Paul and Stillwater. The Revised Statutes of 1851 (p. 578) specifically exempted

The legislature of 1851 authorized the establishment of two new ferries, and altered the charter granted to Franklin Steele in 1849. John Banfill, who had petitioned vainly to the session of 1849 for a charter, was granted the right to maintain a ferry across the Mississippi River at the mouth of Rice Creek, a short distance above St. Anthony, near what later came to be known as Fridley, in Anoka County. A license was also granted to William A. Cheever for a ferry across the Mississippi River just below the Falls of St. Anthony, near the present site of the University of Minnesota. ⁵

By the time the next session of the legislature met, the picture was changing, for the Indian treaties had been negotiated, and already several hundreds of land-hungry settlers had invaded the "Suland" without waiting for the land to be opened to settlement. They clamored for the ratification of the treaties, and they worked feverishly for the opening of roads. As a consequence, the legislature of 1852 authorized three of these squatters, living on the banks of the Mississippi River, to lay out a road from Read's Landing by way of "the high lands between the tributaries of the Waziojle river and those of the Mississippi and Cannon rivers,

from repeal the act of the Wisconsin legislature granting to Nobles the right to establish a ferry across Lake St. Croix at Willow River. The town of Willow River is today known as Hudson.

5. Laws, 1851, p. 29, 31, 37. Steele's new charter was of ten years' duration.

by Okaman Lake, to such point on the Minnesota river as may . . . be considered the most practicable." It is a tribute to the legislators' regard for the law that they added a proviso that the law should not take effect "unless the late Sioux treaty be ratified by Congress at its present session." 6

More active was the interest shown during this session in the establishment of ferries. The legislature passed thirteen bills granting new charters for ferries and one modifying the terms of a charter previously granted. Eleven of these were for ferries across the Mississippi River, and the remaining three, across the St. Croix. The majority of the charters granted were for ferries along the upper portion of the Mississippi River, where settlements had already started. Three of them, however, were intended to provide a means of getting directly to the new trans-Mississippi country from Wisconsin. One of these was for a ferry across the river at what became the village of La Crescent, opposite La Crosse, Wisconsin; the second provided an indirect entrance at Oliver's Grove, or Hastings; and the third was designed to provide a connecting link at the foot of Lake Pepin with the new territorial road from Read's Landing to the Minnesota River. All four-

6. Laws, 1852, p. 57. The "Waziojie river" is the Zumbro River of today, and "Okaman Lake" is Lake Elysian in Waseca and Le Sueur counties. Upham, Geographic Names, 301, 559.

teen ferries were designed to perform an important function in providing access to the land and developing the trade and commerce of the frontier country. ⁷

But the pioneers of the early fifties looked farther into the future. They planned a bridge across the Mississippi, and the legislature of 1852 incorporated the Mississippi Bridge Company and authorized it to build a toll bridge near the Falls of St. Anthony, between Nicollet Island, above the falls, and Spirit Island, below the falls. The capital stock of the company was set at \$25,000, divided into 250 shares

7. Laws, 1852, p. 1, 5, 27, 28, 31, 39, 41-44, 50, 53-56, 59. The three ferries chartered on the St. Croix were at Taylor's Falls, Stillwater, and Willow River, Wisconsin. Two charters were granted for ferries at St. Paul -- at the Upper Landing and the Lower Landing -- both of which had been operating under charters granted by the commissioners of Ramsey County in 1849. See post, p. 221, 238. Two charters were granted for ferries in St. Anthony. On the upper Mississippi River a ferry was authorized at the mouth of Swan River, where the military road to Long Prairie crossed the river; other ferries were chartered at Crow Wing, Sauk Rapids, and the mouth of the Crow River. After a charter had been granted to Anson Northup, Pierre Bottineau, Louis Roberts, and Peter Poncin for a ferry a mile and a half above the "upper rapids, at the Falls of St. Anthony," it was discovered that the location was not the one desired by the petitioners. A new bill failed to reach a vote before the session adjourned. Charters for a number of ferries were lost, including one to Antoine Roberts for a ferry across the Rum River and one to Captain William B. Dodd for one across the Minnesota River. It is interesting, in connection with bills lost, to note that one for a territorial road from St. Paul to a point opposite Fort Snelling was refused. Presumably this was because the proposed road would lie entirely within the limits of Ramsey County, and hence was a county undertaking. Minnesota Pioneer, March 11, 1852.

of \$100 each, and the term of the charter was twenty years. If the bridge was not commenced within two years and completed within five years, the charter was to be forfeited, and the legislature, after fifteen years, could assess a valuation, which the company was to be compelled to accept, in case the county or counties in which the bridge was built wished to purchase it.

This bill was not passed on the spur of the moment. It was the result of persistent agitation and planning, begun when the territory was first organized and kept alive by the constant dinning of men like James M. Goodhue. Goodhue dreamed of such a bridge across the river at St. Paul, and he visioned the great commercial and military advantages which it would bring to the new territory. It would focus there all the converging roads and railroads of the nation, he predicted, and make St. Paul the gateway between the two great oceans. But Goodhue wanted a "National bridge, to be free in all coming time, for all but the enemies of our beloved country." Sooner or later, he declared, something better than boats would be wanted to cross the Mississippi, dividing the continent as it did, and he wanted the government to make a grant of land, twenty miles square, the proceeds from the sale of which might be used for a bridge fund. Goodhue's plans were for a bridge at St. Paul, but the construction of a bridge at St. Anthony had an obvious advantage, namely, that it would

not interfere with navigation. The editor of a St. Anthony newspaper prophesied that every dollar of capital invested in such an improvement would "add ten-fold to the value of property." 8

The legislature in 1853 authorized the relocation of a portion of the road from Point Douglas to St. Paul because its original location was unsatisfactory, but it was to be done on condition that none of the work "shall be at the expense of the Territory." The legislature also authorized the relocation of the western portion of the road from St. Anthony Falls to Willow River, which had been ordered laid out the previous year, likewise without additional expense to the territory. The construction of the military road from Point Douglas to Lake Superior opened an attractive vista of trade to the towns along the Mississippi River, but St. Paul and St. Anthony felt that they might lose out on a great deal of this trade because they were off the regular route of travel. To counteract the disadvantage of their location, therefore, they prevailed upon the legislature to authorize the construction of a road from St. Anthony, by way of Chisago Lake, to Taylor's Falls or some point on the military road

8. Laws, 1852, p. 19-21; Minnesota Pioneer, December 12, 1849, December 25, 1851; St. Anthony Express, February 21, 1852. Among the incorporators of the bridge company were Henry M. Rice, Franklin Steele, Henry H. Sibley, and John H. Stevens, all figures of prominence in Minnesota.

south of that town, and of a branch road from St. Paul, by way of Little Canada, to an intersection with the St. Anthony-Taylor's Falls road. The expense of laying out and constructing these roads was to be borne by the counties through which they passed. ⁹

The problem of opening the way into the "Suland" was again at the fore during this session of the legislature. As a result, a road from St. Anthony Falls, by way of the sawmill which Simon Stevens had built on the shores of Lake Minnetonka in 1852, to the western boundary of Sibley County was authorized. The legislature bound the territorial treasurer to pay the cost of laying out this road, provided that it would not amount to more than a hundred dollars. The road was intended to open a route, not only to the "Suland," but to the new fort on the upper Minnesota River as well. ¹⁰

The legislature of 1853 was not disposed to act upon applications for ferries, and consequently not a charter was granted. It is indicative of the interest in the new territory west of the Mississippi River, and the eagerness of the pioneers to get to it, that three bills for ferry charters across the Minnesota River were introduced, two of which requested locations

9. Laws, 1853, p. 56, 60, 62; Weekly Minnesotian, June 18, 1853.

10. Laws, 1853, p. 55; Upham and Dunlap, Minnesota Biographies, 742.

at Traverse des Sioux. The squatters upon the "Suland" were also sufficiently numerous to agitate for the opening of a road from the Cannon River country to Fort Ridgely. This, too, was denied them.¹¹

By the time the next legislature met, the boom in the "Suland" was well under way. The first lands sold in this new domain were sold by the federal government during the spring, and they were located in the townships along the Mississippi River in the southeastern portion of the territory; nevertheless, the pioneers were moving into the choicest spots in the interior. At the forks of the Cannon and Straight rivers, the village of Faribault was being settled. Along the Minnesota River, Bloomington, Shakopee, Traverse des Sioux, Mankato, and a score of other towns were beginning a mushroom-like growth, which, the following year, became a boom. When Congress, in 1854, extended the right of pre-emption to the unsurveyed lands of the west, the squatters were made secure in their tenure. When their lands were brought up for sale, they had only to pay the minimum price of \$1.25 per acre, and no man could bid against them.

11. These bills are Council File numbers 4 and 8, and House File numbers 9 and 37. They are in the non-current archives of the secretary of state's office, which are in the custody of the Minnesota Historical Society. Most of the legislative bills cited may be found in those archives. Unless they are filed elsewhere the location of bills will hereafter not be designated.

The road between Lake Pepin and the Minnesota River was laid out by the end of October, 1852. It led from Read's Landing westward to Faribault and Traverse des Sioux, and thence along the west bank of the Minnesota to Mankato. Not to be outdone by their rivals at Read's Landing and Wabasha, the ambitious members of the Rollingsstone colony, near the site of present-day Winona, and the settlers at Bonnell's Landing, opposite La Crosse, determined to open roads of their own to the Minnesota River, even though they did not have legislative sanction. By the summer of 1853 they were promising that their roads would be opened before fall. The road from St. Anthony Falls to the western boundary of Sibley County was opened in the summer of 1853. It extended from St. Anthony Falls, by way of Minnetonka and Henderson, another new town on the Minnesota River, westward to Fort Ridgely. Contemporary accounts do not praise the condition of the road, but it was passable, for a stage line between St. Paul and Fort Ridgely was operated over it. 12

Minnesota settlers had cause for fretting when they considered the inadequacy of their means of communication during the winter months. In the summer

12. Minnesota Democrat, June 30, July 28, October 20, 1852, July 13, 1853; Minnesota Pioneer, October 21, December 9, 1852, June 9, August 18, 25, December 1, 1853; Weekly Minnesotian, July 17, 1852; St. Anthony Express, July 1, December 31, 1853.

the steamboats plying on the Mississippi River brought the frontier its supplies, its mail, and its visitors. But the river was frozen over for four or five months of the year, and then the frontier was almost completely isolated. A road from Prairie du Chien to Willow River was opened on the Wisconsin side of the river in 1848, and this rough, roundabout road was Minnesota's sole land route to the outer world. But the Minnesota pioneers were determined to open a more direct route to the settled country to the south. They were aided by the businessmen of Dubuque who foresaw that a great deal of their business with the upper river country would be sacrificed to Prairie du Chien unless steps were taken to create a more favorable route of travel toward the northland. In March, 1852, John Wakefield of Dubuque suggested to the editor of the Minnesota Pioneer that Minnesotans and Dubuque businessmen cooperate to open a road. A number of routes were suggested for this road. One plan was to extend the military road along the west bank of the Mississippi from Wabasha to the Iowa line, where it would meet a road from Lansing. Another proposed route led northward from Decorah. There was also agitation for a road following the valleys of the Red Cedar and Straight rivers to Faribault, from which place there was already a wagon road to Mendota that had been used for almost thirty years by the traders at Alexander Faribault's post. Alternative

routes from Fort Atkinson to Mankato, and from Dubuque to Mankato or Traverse des Sioux were urged by the promoters of these embryo towns. ¹³

The legislature of 1854 authorized the laying out of two roads leading toward Dubuque. One of them was to extend southward from Read's Landing to the Iowa line. The other provided a route following the old trading road to Faribault, then up the valley of the Straight River "to a point on the Iowa line, in the direction of Fort Atkinson." The road from Read's Landing to the Iowa line required, according to contemporary ideas of road making, less than thirty-five miles of road construction. For the remainder of the distance, it was claimed, there already existed roads or natural trails. A triweekly mail was promised over this route, and one witness was found who declared that he had driven heavily loaded teams over the major portion of it. On March 11, 1854, a Dr. Andros, of Garnavillo, Iowa, completed what was hailed as the first overland trip by team from Iowa to St. Paul, demonstrating the feasibility of the road. The mail line was contracted for by John Frink and Company, and was scheduled to begin on July 1, 1854. ¹⁴

13. Minnesota Pioneer, March 4, July 1, 8, 22, August 5, 26, September 9, 23, October 7, 14, 28, 1852, April 7, 1853; Minnesota Democrat, March 24, August 4, September 22, 1852.

14. Laws, 1854, p. 64, 69; Minnesota Pioneer, January 5, 1854; Minnesota Democrat, March 15, July 19, 1854; Weekly Minnesotian, January 7, 1854; Daily Minnesotian, June 1, 1854.

Meanwhile, the Straight River Valley road was being laid out, and Alexander Faribault claimed that there would be no difficulty in driving a team over it even before any work was done. The claim seems to have been justified, for the commissioners who laid out the road reported that they met a train of nearly thirty wagons filled with Norwegians bound for Traverse des Sioux and Mankato, who were bringing with them a hundred and fifty head of cattle; and during the course of a single day's journey they saw two hundred emigrant wagons enroute to Minnesota. The commissioners placed stakes in the prairie sod at regular intervals, and returned, relying upon the wheels of following emigrant wagons to mark more permanently the emigrant trail which they laid out. ¹⁵

When the mail line was established, however, it followed neither of these routes. On July 18, 1854, the Daily Minnesotian announced the arrival in St. Paul, two days earlier, of a Frink and Walker stage, the first of a "regular line" that was about to be established between St. Paul and Dubuque. It had followed a route picked out by the agents of the company, which was approximately midway between the two roads opened by authority of the legislature. It entered Minnesota at Elliot and passed through Carimona, Chatfield, Rochester, Oronoco,

15. St. Paul Daily Times, June 30, July 6, 24, 1854; Daily Minnesotian, June 30, July 7, 1854; Minnesota Democrat, July 12, 1854; Minnesota Pioneer, January 5, 1854.

and Cannon Falls to St. Paul. Regular mail-stage service was begun late in August, and the route became so popular that the legislature of 1855 authorized the establishment of a new territorial road from St. Paul to Elliot. 16

These roads performed two very important functions. They provided an all-Minnesota communication with the Iowa communities, and they also furnished a means of getting into the fertile areas of the "Suland." The energetic citizens of Mankato added another route into the "Suland" by laying out a road southward to Fort Dodge. Another road that opened up a large area to settlement was built by the citizens of Traverse des Sioux, who, failing to get legislative sanction for a road from their town to Fort Ridgely, took up subscriptions and built one anyway, thereby entering into a spirited rivalry with Mankato and Henderson for the profitable business of transporting supplies to the garrison. 17

16. St. Paul Daily Times, July 19, November 22, 1854; Daily Minnesota Pioneer, December 1, 12, 1854; Minnesota Democrat, August 30, December 15, 20, 1854; January 3, August 22, 1855; Daily Minnesotian, July 18, December 9, 12, 19, 20, 1854, January 27, March 1, 16, May 5, July 26, 1855; Laws, 1855, p. 142. The new route proved popular for all kinds of travel. Burbank's express line adopted it in December, 1854, and the number of private conveyances that followed it was enormous. An interesting feature of this road was a lighthouse which was erected at Elliot to guide travelers along the prairie road. Daily Minnesotian, March 1, 1855.

17. Minnesota Democrat, November 17, 1852, April 5, 1854; Weekly Minnesotian, August 6, 1853; Minnesota Pioneer, April 20, 1854.



STATE OF CALIFORNIA, COUNTY OF SAN FRANCISCO

A new east and west road from Red Wing to Fort Ridgely was authorized by the legislature in 1854. By the end of July, the citizens of Red Wing had made a road to Faribault. From that point to the Minnesota River, they followed the Read's Landing- Traverse des Sioux road which had been laid out the previous year, and from Traverse des Sioux to Fort Ridgely the road recently opened by the people of Traverse des Sioux. Thus they opened a line of communication between Red Wing and the frontier outpost. In spite of the agitation of the previous two years, however, no territorial road was laid out westward from Winona. The people of Winona, therefore, on their own initiative undertook to build a connection with the mail-stage line which ran on the Elliot road.¹⁸ To aid the new towns on the west side of the Mississippi River, the legislature authorized the opening of a road from Minneapolis along the west side of the river to Sauk Rapids. Another road which came to serve a vital need was ordered laid out from St. Paul to Shakopee, and thence to Traverse des Sioux.¹⁹

When the frontier financiers saw that the Mississippi Bridge Company would turn out to be a profitable investment, they were easily persuaded of the financial possibilities of other bridges in the territory. Con-

18. Laws, 1854, p. 45, 46; Daily Minnesotian, July 25, 1854; Winona Republican, December 11, 1855.

19. Laws, 1854, p. 52, 68.

sequently, the legislature in 1854 incorporated three new bridge companies. The Minnesota Bridge Company was authorized to construct a toll bridge across the Mississippi River not more than two miles below the Falls of St. Anthony nor less than one mile from the Mississippi Bridge Company's structure. The franchise was to run for thirty-five years, and at the end of that time the bridge was to become a free bridge and the property of the county or counties in which it was built. Goodhue's dream of a bridge across the Mississippi River at St. Paul approached a step closer to realization in 1854. The legislature incorporated the St. Paul Bridge Company and authorized it to build a bridge across the river within the city, which, after thirty-five years, was to become the property of Ramsey and Dakota counties. An unusual feature of this charter was the inclusion of a clause permitting the city of St. Paul or Ramsey and Dakota counties to purchase a portion of the stock, provided that the people voted in favor of such an expenditure. The other toll bridge authorized by the legislature of 1854 was to be constructed over the St. Croix River at Taylor's Falls. Here again a proviso was made for the sale of the bridge to Polk County in Wisconsin and Chisago County in Minnesota in case it was desired to make it a free bridge, but the price could not be more than the total cost,

plus fifteen per cent. ²⁰

There were, therefore, four schemes for converting toll bridges into free bridges. The first method provided for the determination of value at a later date by the legislature, as shown in the charter for the Mississippi Bridge Company at St. Anthony. The second method provided for the purchase of bridge stock by the county or local governments concerned, as in the case of the St. Paul Bridge Company. The third method, which was used in the case of the Minnesota Bridge Company, provided that the toll bridge be converted into a free bridge, without further recompense to the builders, after thirty-five years. The last method fixed a maximum price before the bridge was constructed. It is evident that the trend in Minnesota was toward the construction of free bridges, rather than permanently owned, private toll structures. Private capital was utilized to build bridges, the construction of which would have been postponed for many years, if it had been necessary to wait until sufficient funds could be raised by public taxation to pay for them.

The optimism of the men who undertook to build these bridges was not unfounded. The bridge over the Mississippi at the Falls of St. Anthony was a startling financial success. The surveys for it were made during

20. Laws, 1854, p. 72-75, 87-89, 101.

the fall of 1853, and construction of a suspension bridge with a span of 620 feet, costing \$36,000, was begun the next spring. On December 5, 1854, it was opened to foot passengers, and on January 23, 1855, the structure was thrown open to traffic. The event was the occasion of a celebration, for the bridge was the first one ever built across the Mississippi River. Between five and six hundred persons gathered to join in the celebration, and over a hundred sleighs formed in line to cross it. Two months later, on March 25, 1855, the bridge collapsed in a terrific windstorm, but with dogged perseverance the owners proceeded to repair and rebuild it, and on July 4 it was again ready for travelers. The first day, the proprietors reported, the toll receipts amounted to about seventy dollars. During the remainder of July the total receipts of the bridge company reached the surprising sum of \$1,482. The St. Anthony Express jubilantly voiced the general opinion that the bridge was doing more to aid travel and communication than the old ferry ever could have done, and added that "there can be but little doubt but the stock will pay well enough." That fall the bridge was reported to be paying a twenty-four per cent dividend, and for 1856, the bridge company reported, the bridge tolls totaled "upwards of \$19,000." 21

21: Minnesota Pioneer, November 24, 1853; Daily Minnesota Pioneer, December 4, 1854, March 28, 1855; Daily

The completion of this bridge spurred on the efforts of the incorporators of the bridge companies formed in 1854. In the winter of 1856 the bridge at Taylor's Falls, a structure 150 feet long, was opened to traffic. In its first year it paid a dividend of twenty per cent to the stockholders, which was declared to be "doing very well for a new country." ²² The proprietors of the Minnesota Bridge Company and the St. Paul Bridge Company had difficulty in getting their work started. The legislature in 1856, therefore, obligingly extended the time limit within which they were required to begin work or else forfeit their charters. The Minnesota Bridge Company completed its structure in April, 1857, thereby opening a new approach to the west side of the river. Work was begun on the St. Paul bridge in 1856,

Pioneer and Democrat, March 14, 1857; St. Anthony Express, December 9, 1854, January 13, 27, March 31, July 7, August 11, September 29, 1855; Daily Minnesotian, January 18, November 26, 1855; Minnesota Democrat, February 28, 1855. The organization of the bridge company was effected on October 25, 1853. The company at first planned to build a frame abutment type of bridge, but the engineer in charge of construction persuaded them that a suspension bridge could be built within the limits of their capital. St. Anthony Express, December 9, 1854. The account of the celebration of the bridge opening occupied almost the whole issue of the St. Anthony Express for January 27, 1855.

22. Saint Croix Union, November 3, 1855; Daily Pioneer and Democrat, December 29, 1856; Warner and Foote, eds., Washington County, 306. The Union stated that the Chicago County authorities were taking bids for the bridge, that the probable cost of the structure would be about \$45,000, and that the contractor took stock valued at \$1,500 in partial payment for his work.

but the contractor went through bankruptcy that fall, and the company almost lost the money it had invested. With difficulty the proprietors salvaged their stock and obtained the services of a new bridge builder. By December, 1856, the piers had been erected, and the superstructure was about to be put in place, when that contractor failed. The undertaking was a big one for that day -- the estimated cost of the bridge was between \$110,000 and \$120,000 -- but it was so important that every effort was made to keep the work going. When a lack of funds again halted the work in August, 1857, however, the proprietors almost gave up, for their efforts to obtain funds were unavailing -- men with money would invest only when they had a guarantee of three per cent per month.

The legislature, however, had provided the germ of an idea for saving the company when it incorporated in its charter the clause permitting St. Paul and Ramsey or Dakota counties to purchase stock. In desperation the proprietors asked the city to lend its credit to insure the completion of the bridge. To do this, however, legislative sanction had to be obtained, and, accordingly, the first legislature of the state of Minnesota granted permission for holding an election in St. Paul to vote on the question of lending the credit of the city to the bridge company. The result of the election, on March 24, 1858, was overwhelmingly in favor

of the measure, and, with the bonds of the city as security, the company had no difficulty in negotiating with eastern capitalists for funds to complete the bridge. The structure crossed the Mississippi at Wabasha Street, and its length from one abutment to the other was 1,300 feet. There were nine piers, the highest of which was seventy feet above low water, and they were placed far enough apart to permit the widest log rafts to pass. The roadway consisted of two tracks with footpaths, and it was built on a five per cent grade, with the lower end on the West St. Paul side of the river. A visitor to St. Paul in 1864 described it as "a most distressingly untraditional bridge, all on the oblique and very awkward, like a great clumsy fire-escape propped up against a high wall." 23

During the years from 1854 to 1858 Minnesota was attaining the maturity of statehood, and its population expanded from an estimated 32,000 to a probable 160,000. In 1854 the occupation of the great "Suland" was an idealist's dream; by the end of the territorial period

23. Laws, 1856, p. 75, 107, 1858, p. 168-171; Daily Pioneer and Democrat, December 8, 1856, April 5, 21, 25, September 5, 15, 1857, March 17, 24, 25, April 25, May 13, 20, 1858; Bertha L. Heilbron, ed., "An English Visitor of the Civil War Period," in Minnesota History, 9: 284 (September, 1928). The St. Paul bridge was completed in the summer of 1859. Common Council of the City of St. Paul, Proceedings, 1860, p. 109-111. In 1874, the bonds of the city for the bridge having been redeemed, it became a free bridge. Williams, Saint Paul, 449.

it was reality. In 1854 the trading posts along the upper Mississippi River were just beginning to take on the semblance of frontier towns; by 1858 such communities as Anoka, Elk River, St. Cloud, Sauk Rapids, and Little Falls were flourishing business centers for an ever-expanding trading area. At the head of Lake Superior the beginnings of modern Duluth and Superior were made in 1853 and 1854. By 1858 those villages had a firm foothold. The St. Croix Valley, the oldest part of Minnesota in point of years of occupation by white settlers, was a flourishing farming and lumbering center. Frontier real estate promoters at the end of the territorial period were laying out townsites in the fertile valley of the Red River, and the missionary and trader frontiers were moving westward and northward. A vast portion of northern and western Minnesota was still unoccupied in 1858, but the initial frontier stage in the development of economic life was a thing of the past in the great agricultural districts of eastern and southern Minnesota.

During the boom years the territory found that its preparations for settlers, including road facilities, were pitifully inadequate. To meet the emergency, the legislature of 1855 authorized the opening of thirty-eight roads, while the next session ordered ninety-nine territorial roads laid out. Both the regular and special sessions of 1857 were preoccupied with the impending

problems of statehood, and only one of the score or more of road bills that were introduced was passed.

The road was to extend from the Big Sioux River a short distance above Sioux City, along the Missouri River to a point opposite the mouth of the Running Water River -- on the present-day line between Nebraska and South Dakota where the Missouri River dips farthest to the south. ²⁴

To keep pace with the expanding road system, the legislature granted nineteen ferry charters in 1855, and in 1856 thirteen bills chartering forty-five ferries were passed. The regular session of 1857 granted ferry charters to five companies, and the extra session, in the flurry to clean up unfinished territorial business, authorized thirty-six more. The majority of the charters granted during those three years were for ferries across streams well within the limits of the future state, but the extra session of 1857 stepped outside those limits to accommodate travelers through the still unsettled west. Three charters were for ferries across the Red

24. Laws, 1855, p. 49-53, 1856, p. 119-152, 1857, extra session, 318; Esther Jerabek, comp., A Bibliography of Minnesota Territorial Documents, items 463, 490, 527, 539, 542, 543, 552, 589, 595, 596, 603, 604, 607, 616, 625, 651, 657, 658, 663, 727, 753, 786 (Minnesota Historical Society, Special Bulletins, no. 3 -- St. Paul, 1936). No part of the cost of laying out or constructing the road from the Big Sioux to the Missouri River was to be borne by the territory. The reason for this careful exclusion of expense was the imminence of statehood. It already was certain that the western boundary of the state of Minnesota would be east of the eastern terminus of this road.

River, and two, for ferries across the Big Sioux River. Farther west, a ferry across the James River was authorized, and provision was made for three ferries across the Missouri River. 25

At the same time, the territory was moving as rapidly as possible to provide adequate bridges. Fifteen bridge companies were incorporated during this three-year period, most of which were for structures across the Mississippi and St. Croix rivers. One company was incorporated to build a bridge across the Zumbro River in Wabasha County, another was authorized to build across the Elk River, and a third, across the Minnesota River in Le Sueur County. Few of these were completed during the territorial period. The bridges at the Falls of St. Anthony were operating with great financial success, and so was that over the St. Croix. At Watab Anson Northup completed his bridge by the fall of 1857, and at Little Falls the bridge of the Little Falls Manufacturing Company was opened. One newspaper commentator in 1857 claimed that ten bridges over the Mississippi above St. Louis were completed, or in process of construction. 26

25. Laws, 1855, p. 20-22, 34, 70-72, 80, 91, 96, 99, 115-117, 119-123, 134-137, 143, 145, 151, 165, 1856, p. 154-175, 1857, regular session, 154-156, 214, 222, 226-228, 268-270, 1857, extra session, 62-66, 159, 182, 203, 212, 225, 296.

26. Laws, 1856, p. 233, 261, 1857, regular session, 282; Daily Pioneer and Democrat, March 17, 1858; Winona Republican, October 28, 1857; Chatfield Republican, March 21, 1857.

Undoubtedly a great many of the roads which the legislature, during the last three years of the territory, ordered opened could have been opened by the united action of the different counties affected without a legislative act. Many of them probably were authorized to enable political leaders to repay their supporters. To disinterested spectators, the activity of the legislature in laying out roads during 1855 and 1856 seemed unjustifiable, and one of them compared the legislature to a "commissioners' court." Yet, the rush of settlers into the territory justified the activity. A great portion of the country was still inaccessible to home seekers, but, in those regions where there were roads into the hinterland, settlement grew rapidly. One contemporary observer, writing a brief historical sketch of St. Anthony at the beginning of 1854, commented that "the settlement of Minnesota has thus far been confined to the principal rivers, and to the shores of that beautiful series of Lakes, known under the general name of Minnetonka. There is probably not a farm-house, or cabin of a white man, at a distance of ten miles from navigable water, in the whole Territory." 27

Before the rush of immigration got under way in the middle fifties, the principal arteries of travel from north to south and from east to west had been out-

27. Saint Peter Courier, February 12, 1856; St. Anthony Express, January 28, 1854.

lined in the southeastern portion of the territory, and the organized counties did their share in opening local roads. Consequently, incoming settlers suffered less from the lack of roads than pessimists thought. Other portions of the territory were less prepared to care for settlers, however. Much of Minnesota north of the territorial capital was as effectively blocked off as though a stone wall stood in the way. The federal government, it is true, was pledged to build military roads northward to Lake Superior and northwestward to Fort Ripley. But progress on these roads was slow, and at best they offered access to but a small portion of the country. The old Red River trails to the western areas were called upon to supplement the existing roads, opening for settlement the area through which they passed. The settlers at the head of Lake Superior clamored for haste in opening the Point Douglas-St. Louis River road, and, when their pleas failed to effect action, they opened a rough road of their own. The citizens of St. Paul and St. Anthony, equally eager for the completion of the military road, began to reach out with a series of territorial roads which they persuaded the legislature to authorize. The legislature of 1853 had sanctioned the opening of a road from St. Anthony Falls and St. Paul northward to Taylor's Falls, where it was to join the military road and divert to the two towns a portion of the trade which Minnesotans felt would develop

over the lake route as soon as the Sault Ste. Marie Canal was opened. New roads to tap this reservoir of trade were authorized by the legislature in 1854 and again in 1855. 28

In the fall of 1854 a number of St. Paul men set out on their own initiative to explore a route to Lake Superior. A practicable road, they claimed, could be made along a route about fifty miles long extending through Little Canada and the "Rice Lakes" in southeastern Anoka County to Grindstone Creek near its junction with Kettle River. Here, a few miles east of the site of modern Hinckley, it would join the military road from Point Douglas to Lake Superior. In 1855 the legislature authorized the opening of a territorial road over the route. It was opened the following year, the greater

28. Laws, 1854, p. 43, 1855, p. 51; St. Anthony Express, April 15, 29, September 9, 1854; Minnesota Democrat, April 19, 1854; Daily Minnesotian, July 11, 1854. The St. Anthony Express for April 15, 1854, notes that the commissioners were laying out the road, which connected with the military road twenty-four miles from St. Anthony. The route is described as being seven miles shorter than the existing road, and requiring only twelve miles of new construction, the balance following old roads. The Express for September 9, 1854, however, complained of the lack of information about the road, and wished to know whether or not the commissioners had actually located it. The commissioners were charged with having been negligent in the performance of their duties, "for an avenue of communication so important to the interests of St. Anthony, ought by no means to have been neglected." The Daily Minnesotian for July 19, 1854, also complained of the slowness in opening the road.

portion of the cost being paid by St. Paul citizens. 29

The frontier communities of St. Cloud, Sauk Rapids, and Little Falls were as eager to establish contact with that region which so many believed would soon develop into a great port of entry for Minnesota-bound immigrants and goods as were St. Paul and St. Anthony. Their sentiments were expressed by Judge Bradley M. Meeker in the summer of 1855, when he outlined what he thought were the minimum requirements for transportation facilities in the upper country.

We want a broad tread, people's road built [to the head of Lake Superior] by the way of Mille Lac, branching at that point down Rum River to Anoka, and towards Morrison at the mouth of Crow Wing. At this place (Sauk Rapids) it would intersect the military road now about completed from Point Douglass [sic] to Fort Ripley; and crossing here a branch should pass down through the river counties on the west side, by St. Cloud and Monticello, Minneapolis and Fort Snelling. Another branch should pass off southerly in the direction of Fort Ridgely, penetrating the rich country drained by the two branches of the Crow River, whilst another should stretch away northwesterly towards the Big Bend of the Missouri. . . . We must have a road from the Great Lake to our interior.

The road to Lake Superior, because of its directness, would, he felt, be ideal for a railroad, "the first section of the grand Northern Emigrant Route to the Pacific." Judge Meeker thought that the national gov-

29. Daily Minnesotian, April 14, December 8, 1855; Daily Minnesota Pioneer, April 24, May 23, 24, 1855; Daily Pioneer and Democrat, April 12, 1857. The latter article itemizes the cost of the old bridge over the Rice Lakes which had been repaired in 1856. The cost was largely met by gifts of businessmen of St. Paul, and by a contribution of \$300 from Ramsey County.

ernment could be induced to appropriate \$30,000 for the construction of the road, and this, he was sure, would be ample for the purpose. 30

Judge Meeker stirred up not only the people of the upper country, but those of St. Anthony as well. The editor of the St. Anthony Express pleaded with his readers to "go up and not down to buy our stores. Open a new inlet for immigration -- a new route for pleasure travelers, and then stand by and see the rush." At the same time, Clement H. Beaulieu, a trader at Crow Wing, gave loud publicity to the necessity for a road from Lake Superior to Crow Wing "in supplying the various military posts in the north of Minnesota" as well as providing an entry for supplies for the lumbering industry already being developed. That fall a group of St. Cloud property owners, led by George F. Brott, principal promoter of the town, explored a route which passed along the northern shore of Mille Lacs, then turned eastward to join the Point Douglas-St. Louis River military road. A short time later a member of the territorial legislature, William Sturgis of Little Falls, marked out a route from his home to Mille Lacs, where it joined the road laid out by Brott. He was followed by still another road-locating party, one led by Anson Northup, which laid out a road from Crow Wing to the Brott road.

By the time winter set in, therefore, a route had been established from Superior to Mille Lacs, with branches to Crow Wing, Little Falls, and St. Cloud. The enthusiastic backers of these routes obtained the passage of an act in 1856 legalizing the roads and declaring them to be territorial roads. Equally enthusiastic supporters of the movement at Superior provided liberal contributions of men, money, and supplies, and began to build the eastern portion, while parties from St. Cloud, Little Falls, and Crow Wing began work on their sections of it, and by the end of March a passable road had been opened from Lake Superior to the Mississippi River. 31

The opening of this road troubled St. Paul businessmen, for, if the capital was to retain its domination over the other towns of Minnesota, it had to retain a lead in the development of its transportation facilities. The Kettle River road did not provide a satisfactory summer outlet to the Lake Superior country, for much of the country through which it was built was swampy, and construction was difficult and expensive. The swamps were small obstacles to winter travel, but St. Paulites wanted an all-year-round road. In the early spring of 1856 a road was opened from Bayfield, Wisconsin, through

31. St. Anthony Express, August 25, December 1, 8, 15, 1855; Daily Pioneer and Democrat, November 8, 30, 1855, January 5, 22, February 12, April 4, 1856; Daily Minnesotian, August 24, 1855; Sauk Rapids Frontiersman, September 25, October 3, 1856; Laws, 1856, p. 136.

the lake region of northwestern Wisconsin to the military road at Taylor's Falls. On November 20, 1856, a regular mail-stage service was begun over this route. The stage ran but twice a month, but it provided a connection with territorial Minnesota. St. Paul was warned to be prepared to receive an overwhelming flood of immigrants by this new route the following season, for Bayfield, not Superior, it was predicted, would henceforth be the favored port on the lake. The road was built at an expense of thousands of dollars, said one resident of Bayfield, and it was entirely "a private affair; assistance has neither been received nor asked for from other quarters." 32

The discussion about these roads through northeastern Minnesota focused attention on a wide area of virgin timber and reputedly rich farming lands, but the financial difficulties in the way of building good roads through this area were great. The legislature of 1856 asked Congress to appropriate funds for the construction of the road from St. Paul to Kettle River on the grounds that it offered a direct route to Lake Superior. When their prayer was unanswered in 1856, they repeated it in 1857, and added a request for funds to construct a military road from Pigeon River, on the northern boundary, to Fond du Lac, and thence westward,

32. Daily Pioneer and Democrat, November 30, 1855, June 4, August 23, November 17, 1856, March 23, 1857.

over the Brott route, to Mille Lacs and Fort Ripley.

This request also was denied. ³³

Other areas, too, were calling for the attention of the road makers of territorial Minnesota. The Red River Valley long had attracted the trader's fancy, for out of it came the great annual caravans of the settlement at Pembina, laden with furs and hides. A military road up the east bank of the Mississippi River made easier the long and difficult journey as far as Fort Ripley. Beyond that point, however, the travelers still had to depend entirely upon the rough natural roads made by the caravans, and these at best were unsatisfactory. James M. Goodhue from his first appearance in St. Paul had recognized the commercial importance of this region, and Governor Ramsey had pleaded for the development of its trade in his first message to the legislature. In 1853 the editor of the St. Paul Minnesotian made lavish estimates of the commercial advantages which would accrue to St. Paul by the construction of a road over the dry and practicable route from Fort Snelling westward to the Red River. The road was

33. Laws, 1856, p. 373, 1857, regular session, p. 292, 294. Even in 1854 the legislature had dreamed of tapping this great interior country. At that time a memorial to Congress asked for an appropriation for the construction of a road from St. Paul, by way of Little Canada and the western branch of the Sunrise River in Chicago County, to a point on the Rum River in the southwestern portion of what today is Isanti County. Laws, 1854, p. 164.

not built during the territorial period, but in 1855 the legislature authorized the opening of a road from Fort Ripley to a point on the Red River opposite the mouth of the Pembina River, and the same session adopted a memorial asking for a federal appropriation for its construction. In 1856 the legislature asked Congress for an appropriation to open a road on the west side of the Mississippi River from Fort Snelling to Pembina. Neither petition was directly granted, but Congress did grant an appropriation for the removal of timber along the Red River road from Crow Wing to the Red River. 34

A road from St. Cloud to the Red River trail in the upper part of the Sauk Valley was ordered opened by the legislature of 1855. In 1856 this road was extended to the Red River, at the mouth of the Bois des Sioux River, and thence to Pembina. That same year an independent group from Henderson did its part to open a way to the Red River Valley by establishing a road from Henderson to the mouth of the Bois des Sioux River by way of Glencoe, Hutchinson, and Red Cedar Island Lake in Kandiyohi County. It was reported that Joseph Rolette of Pembina would send his caravan of Red River carts that way in 1856, and the prediction was made that the new road would become "the most im-

34. Ante, p. 69, 97; Weekly Minnesotian, August 6, 1853; Laws, 1855, p. 51, 182, 1856, p. 208, 360.

portant thoroughfare in the Territory." However, no record of Rolette's train passing over this route has been found, and it is doubtful that the road became a popular one. 35

During the early years of the fifties, the greater portion of the roads authorized by the legislature had been opened in the southeastern portion of the territory. After 1855 an increasingly large proportion of road legislation was devoted to the opening of roads in the western and southwestern portions. The session of 1856, for instance, ordered four roads laid out from St. Cloud -- to Lac qui Parle, to Forest City, to Lake Traverse and beyond to Fort Union, and to Long Prairie. A road to connect the frontier forts -- Ripley and Ridgely -- was also ordered opened, and a host of roads were authorized for the region between these points and the Minnesota and Mississippi rivers to the south. It was during these years that the settlements in the Big Woods area between the Minnesota and Mississippi rivers were being made. Settlers in the portion of the territory east of the Minnesota already had assumed the complacent attitude of the elder brother toward these struggling fledglings of the west. 36

It was the territorial legislature which authorized

35. Laws, 1855, p. 141, 1856, p. 122; Daily Pioneer and Democrat, June 5, 1856.

36. Laws, 1856, p. 123-132, 135-139, 143, 144, 147.

the opening of these roads, but little of the total cost of doing so was borne by the territory. In a few cases where a road passed through country which was not yet organized into counties, or where white population was too sparse to pay for laying it out, the legislature did provide that the territorial treasurer should pay the costs. This was true, for example, in the case of the road extending from the foot of Lake Pepin to the Minnesota River, which was authorized in 1852, but the total of such expenditures apparently was not great. The territory spent approximately \$1,400 for laying out roads up to 1855, but in the last part of the territorial period, the legislature took advantage of every opportunity to avoid any such expense. For example, the laws authorizing the opening of territorial roads from St. Cloud, Little Falls, and Crow Wing to Mille Lacs, and thence to Lake Superior, merely empowered the men who had explored the routes to deposit copies of the plats of the routes with the officers of the counties through which the roads passed, and declared the roads to be territorial roads. No attempt was made to compensate any of them for the work they had performed. 37

37. The reports of the territorial auditor show that the following items were expended for laying out roads: in 1850, \$481.50; in 1851, \$88.50; in 1853, \$638; in 1855, \$197.43. The auditor's reports are contained in Council Journals, 1851, p. 189, 1852, p. 163, 1853, p. 163-166, 1854, appendix, 29, 1856, appendix, 18.

The counties assumed the greater proportion of the expense of laying out roads and constructing them. Not only did they pay the cost of laying out territorial roads, but that of opening such roads as the commissioners of the counties deemed necessary. How large this item of expense was in comparison with the other expenses of county government is difficult to determine, but it was an appreciable proportion of county outlay. In Fillmore County, for example, the total county expenses for roads and bridges for 1857 approximated \$2,475 of a total county expenditure of about \$15,730, or a little less than one-sixth. The largest single item in this expenditure for roads was for bridges, which accounted for \$1,455. The remainder of the costs for roads included expenditures for locating roads, totaling \$315, fees for technical services -- surveyors, chainmen, and axmen -- amounting to \$320, and the salaries paid to road supervisors, which totaled \$385. In Winona County the total expenditure for roads and bridges for the twenty-month period from January, 1857, to September, 1858, amounted to about \$2,780, while during the five years from 1854 to 1858 the total amount expended for this purpose was about \$3,700. How many miles of road were constructed during the territorial period in these counties is likewise unknown, but Houston County, which adjoins Winona and Fillmore counties, was reported to have a total of 5,400 miles

of road in 1858, and the total in these other counties could not have been much less. 38

When a county or the territory failed to open roads to provide mail and stage service for a community or to enhance its position as a market center, contributions were sought from businessmen and other public-spirited citizens to raise the necessary funds, the expenditure of which was entrusted to one of their number or to a committee of citizens. The Dodd road, which was built in 1853 from Traverse des Sioux to St. Paul, was financed in this way. During the same year a bridge on the road from Kaposia to St. Paul fell into such a state of disrepair that it was unsafe for use. When the county failed to repair it, St. Paul merchants raised seventy-five or eighty dollars in five-dollar contributions to finance the work. St. Anthony merchants in 1854 raised money in the same way to build a road to Lake Minnetonka, and a committee of businessmen supervised the construction of the road by the contractor. In the fall of 1857 the businessmen of Winona, rebelling against the intolerable condition of the road leading to Stockton, donated more than \$4,000 to build a new road which led on an easy gradient up the hill

38. Chatfield Democrat, January 27, 1858; Winona Republican, October 27, 1858; Hokah Chief, September 25, 1858.

to the prairie beyond. 39

Sometimes the labor of building a new road was performed by the citizens themselves. During the summer of 1852 the people on the west side of the Mississippi River appealed to the citizens of St. Paul to help them build a road to St. Paul. The people along the Zumbro River, twenty-five miles inland from Red Wing, had trouble finding a passable road to the latter place. To help solve their difficulties, the people of Red Wing turned out in a body to construct a road from Red Wing to the Zumbro settlement. There were also occasional public-spirited men like John Morgan, proprietor of the Halfway House on the road from St. Paul to Stillwater, who cut a road around the swamp near his hostelry and built a bridge over a brook near by, "making that part of the Stillwater road very good." 40

In view of the overwhelming number of new roads that the frontier needed, it is not surprising that private contributions or voluntary labor on the part of citizens should have supplemented the labor tax which the law required. A statement by a road supervisor in Houston County illustrates the essential weakness of

39. Ante, p. 64; Minnesota Pioneer, December 29, 1853; St. Anthony Express, October 1, November 19, December 17, 1853; Winona Republican, August 25, September 1, 8, November 9, December 23, 1857.

40. Minnesota Pioneer, July 8, 22, 1852; Daily Minnesotian, July 26, 1854; Daily Pioneer and Democrat, May 20, 1858; Minnesota Democrat, June 17, 1851.

the statute labor method of building roads. An important road from Hokah to the Mississippi River needed repairing, but, since "there is not at present any road tax to be worked out," he called for volunteers to do the work. After the required labor tax was paid and the limited road and bridge fund was expended, there was no way of getting work done except by volunteer workers, or by workers paid by private donations. The residents of McLeod County in 1855 were almost desperate for roads, but they were not able to construct those already laid out. The Crow River Valley, north and west of Glencoe, was in a similar predicament. By doing only what was required to enable wagons to pass through the forests, a road to Monticello was opened in the summer of 1856. In the face of criticism from incoming settlers, those on hand labored feverishly to open trails to communities on established roads or on navigable streams. The overburdened road supervisor bore the brunt of the criticism; sometimes the fault was his, but it cannot be denied that his task was an onerous one. The frontier settlers were poor, and the aversion to heavy taxation was acute. 41

41. Post, p. 222, 228; Hokah Chief, September 18, 1858; St. Paul Daily Times, November 9, December 5, 1855; Minnesota Democrat, July 11, August 4, 1855, June 28, 1856; Minnesota Pioneer, May 6, 1852, July 21, 1853; Weekly Minnesotian, May 28, June 25, July 2, December 3, 1853, June 25, 1858; Winona Republican, June 23, 1857; Daily Pioneer and Democrat, June 27, 1856, April 5, 1857; Daily Minnesota Pioneer, March 14, 1855. K. K.

Opening roads in Minnesota was made urgent by many factors, and of these the demand for regular and frequent delivery of mail was of major importance. In 1849, when the territory had a population of less than 5,000, frequent mail deliveries scarcely could have been expected. Yet, the settlers in the St. Croix Valley demanded better mail service during the fall of 1848, and futile attempts were made to obtain mail facilities for the trading posts in the Mississippi Valley and for Pembina. At the opening of the territorial period there was one main mail route, which extended from Prairie du Chien up the Mississippi River to Minnesota. The service was at first semimonthly, but in 1849 weekly mail service during the summer months was inaugurated. A request by Goodhue for additional service was denied, because, the postmaster general replied, even under the weekly plan, the receipts amounted

Peck of Le Sueur in a letter to Sibley dated December 3, 1853, asked for information to assist in laying out a road to connect his settlement with the Doda road. This letter is in the Sibley Papers. The article in the Daily Times for November 9, 1855, refers to opposition on the part of Carver County citizens to a heavy burden of taxation, of which a large proportion was occasioned by an extensive road-building program. The Minnesotian for December 3, 1853, contains an extensive arraignment of the conduct of the local road supervisor, who, by irregular procedure in allowing the commutation of the poll tax at a lesser rate than the law required, had imperiled the whole road building and repairing program of the county. The article complained that because of these irregularities people would neither pay the commutation money nor perform labor on the roads.

to only a fourth of the expenditures. Goodhue was bitter about the lack of mail facilities. "No mail to Long Meadow," he lamented, "no mail to Crow Wing, no mail to Fort Gaines, no; not even to St. Anthony. . . . We have no mails up the Saint Peters. . . . The villages of the Saint Croix are destitute of mails." 42

In the fall of 1850 the number of routes serving Minnesota was increased to seven, extending to most of the areas then settled, and by 1854 there were twenty-five duly authorized routes in the territory. By the end of the territorial period approximately a hundred routes were in use, but the expansion of the mail service was far behind the expansion of settlement, and its inadequacy was one of the major complaints of the territorial settlers. For a major portion of the territory, the distribution of the mail necessitated the use of land routes. At first, it was possible to deliver mail on horseback, as the contractor for mail delivery between St. Paul and Stillwater did during the summer of 1852, but soon the volume of mail was much greater than could be accommodated on the back of a horse, which, perforce, must also bear a rider. Hence, there arose the necessity for the construction of roads upon which the mail carrier could drive a mail conveyance. 43

42. Minnesota Pioneer, August 16, 1849, January 23, 1850.

43. Arthur J. Larsen, "Roads and Trails in the Minnesota Triangle, 1849-60," in Minnesota History, 11: 399-401 (December, 1930); Minnesota Pioneer, October 7, 1852.

From the very beginning of the period, the problem of mail delivery was bound up with another service coveted by frontiersmen. The landlocked interior had to have a means for the conveyance of travelers, and to fill this need the stagecoach appeared upon the Minnesota scene. It seldom was profitable for a man to contract to cover long distances with the mail at regular intervals. He had an opportunity to profit only if he combined the delivery of mail with some other enterprise, and the logical combination was that of mail delivery with passenger and express service. Moreover, if undertaken singly, they involved a duplication of necessary services. Too often, however, the combination was not on an equal basis, the mail service suffering in favor of the passenger traffic -- if one interprets seriously the references to mail bags which were thrown off in order that more passengers might be carried. ⁴⁴

The first regular mail-stage line in Minnesota was put in operation during the spring of 1849 between St. Paul and Stillwater by Robert Kennedy, who, on May 6, announced the opening of a triweekly stage line between the two places. During that summer he carried the mail without compensation from the government. During 1849

44. See, for example, a letter signed "Tamarack" in the Daily Pioneer and Democrat for April 10, 1856, and an article entitled "Our Present Mail Arrangements," in the issue of the same paper for December 3, 1857.



*The St. Paul-Superior stages and drivers quitting Superior on the opening of the Lake Superior
 & Miss. R.R. from St. Paul to Duluth in August, 1870. For ten years prior to this
 leaving, these stages transported passengers and the mails between Superior and
 St. Paul via the old Military Road.*

FRONTIER STAGECOACHES

[From a photograph in the possession of
 the Minnesota Historical Society.]



a stage line was opened between St. Anthony and St. Paul, and here, too, the proprietor of the stage line carried the mail free. A regular stage line was put into operation between St. Paul and Prairie du Chien after the close of navigation on the Mississippi River in the fall of that year by the mail contractor over the route. Others followed in different parts of the territory as rapidly as mail routes were authorized and settlement begun. At the beginning of 1852 John W. Corbett and Company of St. Paul bought Charles W. W. Borup's mail contract over the route from St. Paul to Crow Wing and put a weekly stage into operation. In the late summer of 1853 a mail-stage service between St. Paul and Fort Ridgely was begun. The Frink and Walker mail-stage line between St. Paul and Dubuque on the Elliots road was started in August, 1854, and that fall a mail-passenger service between St. Paul and Superior was inaugurated over the rough trail chopped through the woods of the north country. A tendency for one firm to monopolize mail contracts and stage lines early became evident, and the rise of the Minnesota Stage Company, headed by James C. Burbank and his associates, constitutes the outstanding example of such monopoly. By the end of the territorial period this firm had ousted the Frink and Walker Company, and in 1865 it was reported to be operating over sixteen hundred miles of routes, employing a vast army of station

men, drivers, and stablemen. 45

The stagecoach was a potent factor in the opening and improving of frontier roads. To facilitate the arrival of the stagecoach, the people of the inland regions of Minnesota eagerly opened trails which they improved as opportunity and finances permitted, and the stagecoach companies themselves were road makers. The road from Elliota to St. Paul by way of Rochester and Cannon Falls, for example, was opened by the employees of the firm of Frink and Walker, in co-operation with the few settlers along the way. Other instances of the initiative of stagecoach companies are recorded. The Minnesota Stage Company, for example, in the closing months of the territorial period, planned a stage route from St. Cloud, up the Sauk River Valley, to Fort Abercrombie on the Red River. The legislature of 1856 had authorized the opening of a road along this route, and, indeed, one had been laid out. When it came time for the inauguration of the stage service, however, no adequate road had been made. Captain Russell Blakeley,

45. Minnesota Pioneer, May 12, August 21, 1849, July 18, 1850, September 29, November 3, 1853; Minnesota Democrat, January 21, 1852; St. Anthony Express, June 24, 1854; Robert Kennedy to Sibley, March 12, July 17, 1850, in Sibley Papers; Larsen, in Minnesota History, 11: 401-405; Larsen, "The Northwestern Express and Transportation Company," in North Dakota Historical Quarterly, 6: 42-54 (October, 1931); Luella Swenson, "Stage Coaching Days in Minnesota," 3. The latter is a term paper prepared in 1927 for a course in Minnesota history at Hamline University, St. Paul. The Minnesota Historical Society has a copy.

then general manager of the company, detailed a road-making crew to open a road suitable for the passage of the stage. The road was not perfect, but it was practicable, and over it the Red River stages of the company clattered and bumped their way for more than a decade. In the fall of 1858 the same company, which had the mail contract over the route from St. Paul to La Crosse, spent \$3,000 in improving the road between Wabasha and Winona. George Nettleton, one of the proprietors of Superior, Wisconsin, and the owner of the stage line, was among the most active of the workers who cut the winter stage road from Superior to Taylor's Falls in 1854. Thus, people and stage men worked together to promote intercourse, and to do that, they had to build roads over which heavy stagecoaches could be drawn at a reasonably rapid rate, without undue discomfort to the traveler. 46

The opening of roads meant much to the inhabitants of the outposts of civilization: the promoters of frontier towns boasted of their location at crossroads; the opening of a mail route was an event of prime importance; the arrival of a regularly scheduled stagecoach was an occasion for genuine rejoicing. The newspapers of the territorial period are filled with glowing descriptions of boom towns which, mushroom-like, were springing

46. Larsen, in Minnesota History, 11: 407; Primmer, in Minnesota History, 15: 283.

into existence, and rarely is such a description found which does not boast of the "remarkable" facilities for communication which the town afforded. Inadequate and poorly made as the roads were, they carried the life blood of the frontier. Where two important roads crossed, there a town was sure to spring up. Where travelers crossed a river on a ferry, an enterprising promoter would soon found a town. Wherever facilities for communication existed, or could be made, the growth of population and the progress of settlement quickened. Without roads, the struggling villages of the Minnesota frontier could not endure long; with roads, even the most insignificant of them might some day hope to attain a position of prime commercial importance among its neighbors. 47

47. Larson, in Minnesota History, 11: 397-399.

V. COMPLETING THE FRONTIER ROAD SYSTEM

During the frontier era in Minnesota's history, wagon roads were built through virgin country in advance of, or contemporaneously with, its occupation by white men. Wagon roads were the sole means by which the communication of a large part of the state was carried on, and widespread interest was displayed in developing a system of main thoroughfares to connect the interior towns with each other and with those on navigable streams. But, with the coming of the railroad, the attitude of the people of Minnesota toward their wagon roads changed perceptibly, for the railroads took the place which, in the frontier age, the main highway system had occupied. Thereafter, the wagon roads were transferred to a position of secondary importance in the communication system. They were looked upon simply as a means for getting to the railroads, and, for the most part, they were of local interest only. No definite period can be pointed out as the one in which this change in popular opinion occurred. When one portion of the state arrived at a point where its most pressing communication needs were satisfied by the railroads, another part, still occupied with the problems of subduing the frontier, was trying

desperately to open wagon roads to the settled areas.

The eagerness for railroads was characteristic of Minnesota settlers from the beginning of the territorial period. Indeed, the craze for them was so pronounced that one editor was constrained to warn his readers that "in our eagerness for Railroads we are forgetting these common avenues through which in reality are flowing our wealth. . . . This road business is a matter of concern to us and we should not neglect it, and the best time to attend to it is now." ¹ Many of the early wagon roads were laid out with the express idea in mind that they might be used later as the routes for railroads. In laying out the Fort Ridgely-South Pass emigrant road, for example, every precaution was taken to insure the adoption of a route which would be a feasible one for a railroad. The same ideal was evidenced in Simpson's reports on the location of the Lake Superior-Point Douglas military road. The military roads, almost without exception, were designed to follow courses which railroad lines could later follow. The idea was carried over to the selection of routes for roads laid out by the territorial legislature. The route of the road from St. Paul to Kettle River, for example, was thought to be feasible for the construction of a railroad from St. Paul to Lake Superior.

1. Saint Peter Courier, June 26, 1857.

In the early sixties, the backers of a project to construct a direct road from St. Cloud to Lake Superior urged the rapid construction of the road not only because it would facilitate immediate communication needs, but also because it was a favorable route for a railroad. Even the frontier road system, therefore, was influenced by the probability of future railroad construction. ²

The eagerness of the farmers and businessmen of Minnesota to have railroads is understandable, for the businessman of the interior towns had to freight his merchandise over fifty or sixty, and sometimes many more, miles of rough roads, while the farmer had to haul his small loads of wheat to market over equally long distances. The wholesaling centers for merchandise and the buying centers for surplus agricultural products were located at points where goods and produce could be shipped most easily and cheaply to or from the mills or manufacturing centers. Transportation was important, and because costs of transportation by team were high, the steamboat, a cheaper means, was the determining factor in the location of important markets and wholesale points. The river towns, therefore, were the focal points to which trade and commerce ultimately

2. Report of Simpson to Abert, September 15, 1851, in 32 Congress, 1 session, House Executive Documents, no. 12, p. 11 (serial 637); Minnesota Democrat, July 15, 1851, September 7, 1853; post, p. 183.

flowed. It was not unheard of, for example, for farmers 150 miles from Winona to haul their surplus wheat to that important wheat market, and businessmen -- even those of a bustling center like Mankato -- sometimes had to freight their goods from Winona, especially when periods of drought restricted navigation on the smaller streams. In 1861 it was estimated that the average distance of the wheat farmers of Minnesota from towns on navigable streams was nearly eighty miles. During the season of grain buying, the congestion of grain wagons at such centers was so great, that they frequently waited in line for two or three days before they could be unloaded. The bumpy, poorly constructed roads of the frontier era restricted the size of loads that a farmer could haul, and the small profit that accrued to him from the sale of his wheat or other produce was quickly swallowed up by the excessive costs of transportation to the market. Under such conditions, it was inevitable that the wagon roads should have been overshadowed in importance by a much more convenient and less expensive railroad. ³

The frontier of settlement at the end of the ter-

3. Henrietta M. Larson, The Wheat Market and the Farmer in Minnesota, 1858-1900, 17-54 (New York, 1926). In a historical account of the village of Mapleton in Blue Earth County, published in the Mapleton Enterprise for April 24, 1891, the statement is made that when the farmers began to raise wheat they "hailed it to the Mississippi river, a load of it being sufficient to buy a barrel of salt and a few nick-nacks."

ritorial period extended beyond the Minnesota River, up the valley of the Mississippi beyond St. Cloud, and northward up the valley of the St. Croix to Sunrise City. Yet scarcely one-third of the area of the state was included in the settled portion. The narrowness of the margin of white occupation is illustrated by the blood-curdling massacre of frontier settlers by Indians at Spirit Lake, Iowa, which occurred during the winter of 1857, and Spirit Lake lies only slightly west of a line drawn through the midpoint of Minnesota from north to south. In 1862 New Ulm was so much a frontier town that its inhabitants were subjected to a furious siege by Indian hostiles, while red men that same summer attacked communities such as Hutchinson, Glencoe, and Maine Prairie near St. Cloud, and at the latter place the panic-stricken inhabitants erected a barricade for defense against a threatened raid. At the head of Lake Superior an isolated settlement carried on its communication with the principal towns of Minnesota over a frontier trail. The line of settlement reached up the Mississippi Valley to Fort Ripley and Crow Wing, and along the Red River trail up the Sauk Valley a few straggling settlements had been begun. Pembina in the Red River Valley was isolated from the rest of Minnesota save for a modicum of communication, and near the junction of the Bois des Sioux and Otter Tail rivers Fort Abercrombie was built to protect the land-hungry

settlers who were reaching out to grasp eligible sites for homes in the valley.

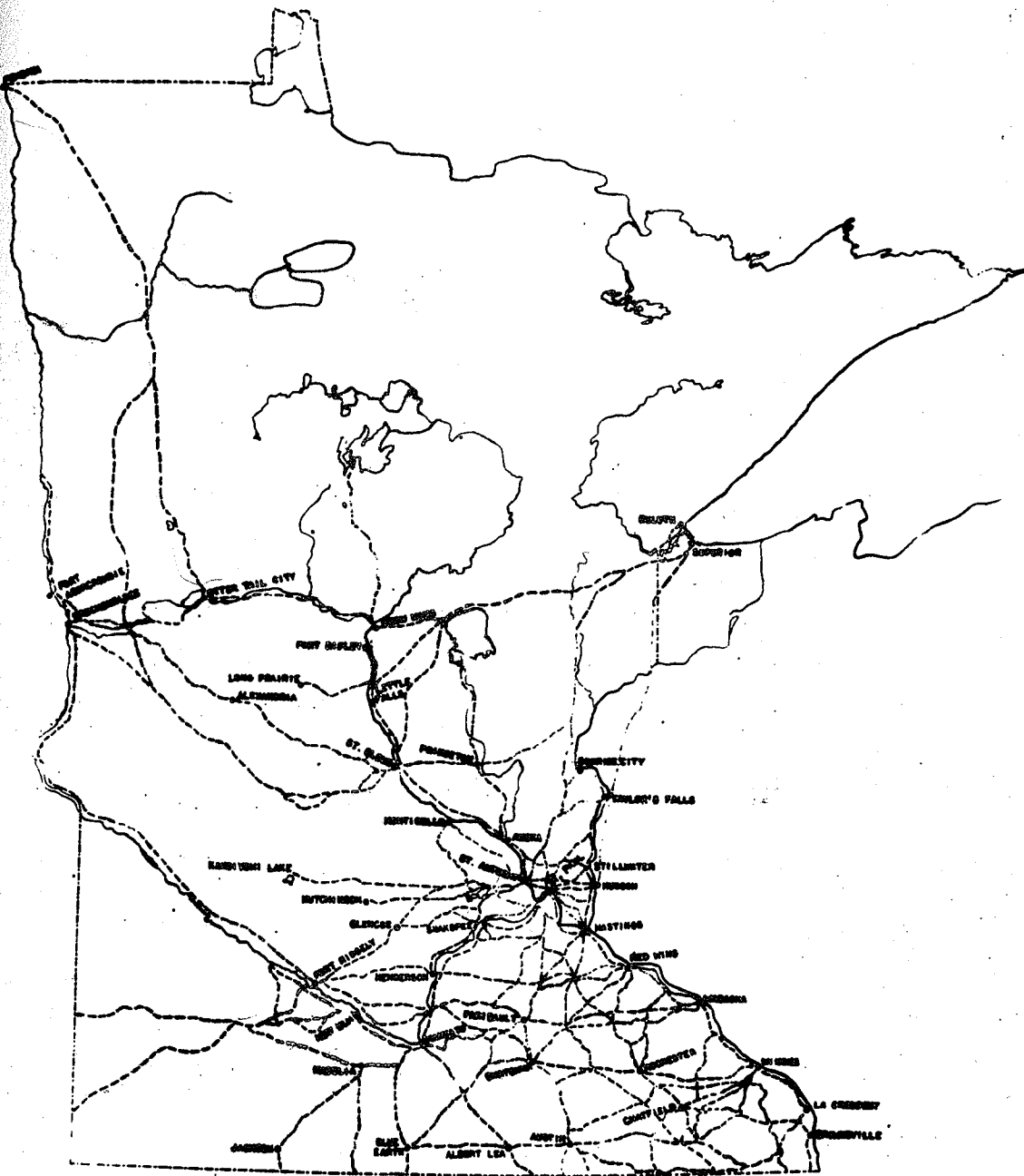
For the settlers in the region beyond the line of the frontier, the immediate concern was the opening of wagon roads. A few of them might penetrate the wilderness to find new homes, but like their predecessors of the fifties in the southeastern portion of Minnesota, unless roads were opened they could not expect settlers to follow them. Consequently, the advance of the frontier of settlement and the advance of the rapidly widening network of roads proceeded side by side, and the frontier of settlement coincided with the borderline beyond which there were no roads.

The legislature of 1857-58 authorized the opening of 166 roads. Most of these were located within the settled areas of southeastern and central Minnesota, but the opening of roads from Henderson to Lake Traverse, from Henderson to the Nobles road at the crossing of the Big Cottonwood River, from Madelia westward to Benton Lake, and from Blue Earth and Mankato to Jackson represents the advance of the frontier in the southwestern portion of the state. Roads from Otter Tail City and St. Cloud to Breckenridge, from Breckenridge to the mouth of the Sheyenne River, and from Minneapolis to the western boundary of the state by way of Kandiyohi meant the extension of the frontier westward beyond the Coteau des Prairies. Similar extensions of the lines of

communication in the northern and northeastern portions of Minnesota testify to the conquest of the wilderness in that direction. ⁴

The full effects of the panic of 1857 were not felt by the people of Minnesota until the spring of 1858. Then only did they realize that the depression was more than a temporary tightening of purse strings. Money almost disappeared from the frontier markets, and in many communities barter and credit money appeared. Hundreds of persons lost their property through foreclosures of mortgages or through forced sales to liquidate debts. As one historian has expressed it, "speculators were forced to become farmers" in order to survive, and the prophecy of a contemporary observer that "the beggar and the broker will change coats . . . without either losing his respectability" was abundantly demonstrated. Recovery from that financial storm was slow, and, about the time conditions were becoming normal, the rebellion of the southern states occurred. As a climax, the Sioux Indians in the summer of 1862 rose in revolt against the whites, and for the next two or three years the frontier settlements had not only to contend with a depressed financial condition and the Civil War, but it had constantly to fear a recurrence of the bloody Indian war as well. The net result was that the frontier advanced

4. Special Laws, 1858, p. 107, 110-112, 117-119, 299, 387.



MAIN ROUTES OF TRAVEL IN MINNESOTA IN 1860

slowly, if at all, during these years. ⁵

As the progress of settlement was slowed down by the war and unrest of the early sixties, so the program of extending roads into the frontier was retarded. In the areas ravaged by the Indians, hundreds of settlers fled in panic from their homes. In that portion of the state it was necessary to reoccupy the frontier, and that process consumed the greater portion of the remaining years of the Civil War period. In areas more remote from the Indian troubles, however, the struggle for the mastery of new soil proceeded as rapidly as the decreased immigration of those years permitted.

The improvement of communication between the upper Mississippi River settlements about St. Cloud and the settlement at the head of Lake Superior engrossed the attention of the pioneers in those regions. The roads laid out during the territorial period slowly were made ready for use. In 1859 citizens of Superior completed a road leading westward to Mille Lacs at an estimated cost of \$20,000. At the same time the people in the upper Mississippi Valley built their end of the road, and in April, 1860, it was so far completed that teams loaded with provisions passed over it. ⁶

5. Larson, The Wheat Market and the Farmer, 18; Minnesota Republican (St. Anthony and Minneapolis), October 30, 1857.

6. Ante, p. 156-160; A. G. Descent to Isaac Crowe, February 24, 1859, in the Crowe Papers, in the possession of the Minnesota Historical Society; New Era (Sauk Rapids), January 26, March 9, April 19, 1860.

In 1864 the legislature authorized the construction of a direct road from St. Cloud to Lake Superior. The city of St. Cloud was authorized to spend up to \$200 for surveying the road and a maximum of \$2,000 toward paying for its construction, while Stearns and St. Louis counties each might expend \$4,000 for construction purposes. By the beginning of summer the road had been laid out for a distance of twenty-five miles, but the surveying of the remainder was deferred until the following year. This was sufficient to give access to the rich pineries of the upper Rum River country, however, and bade fair to give St. Cloud merchants a monopoly of the lucrative trade of this industry, for the lumbermen, up to this time, had to transport their supplies through the mud and ruts of the "most execrable roads" from Anoka and Princeton. ⁷

The extension of the frontier northward during this period was accentuated by a brief, but intense flurry occasioned by the discovery of gold in the country about Vermillion Lake in the summer of 1865. For a few months that fall there was a stampede of gold seekers to the mining country eighty miles north of Duluth. The first gold hunters had to make their way to Vermillion Lake from Duluth on foot through interminable swamps, or by a tedious and exhausting voyage in a canoe up the St.

7. St. Cloud Democrat, March 10, 31, 1864; Special Laws, 1864, p. 328-330.

Louis River. To overcome the barrier of swamp and forest, the citizens of Duluth and Superior began to raise funds for the construction of a wagon road. In response to appeals for financial aid, citizens from St. Paul, St. Anthony, and even from Chicago made contributions, and by the time snow covered the ground, a roadway had been cleared for a distance of forty miles. During the winter a band of miners, bound for Vermilion Lake with equipment for extracting the gold from the quartz rock of the mining country, completed the track.⁸

The opening of this road was the signal for a boom in the mining country. By the time spring came, there were fifteen mining companies in the field, and the wilderness was transformed into a busy mining camp. Then the boom collapsed as suddenly as it had begun. An attempt to revive it in the fall of 1867 was only partially successful, but under the stimulus of proof that there was gold in the Vermilion Lake region, the legislature in 1868 was persuaded to authorize the opening of a road from Duluth to Vermilion Lake which would be passable in summer or winter. The sum of \$5,000 was appropriated for its construction from the internal improvement fund, and more money, if needed, could be drawn from the state's general revenue fund. The follow-

8. St. Paul Pioneer, November 11, 28, 1865, January 28, February 17, March 28, 1866; Primmer, in Minnesota History, 16: 295.

ing year the legislature appropriated an additional \$1,000, and this, together with the federal appropriation of \$10,000 made that same year, was sufficient to build a road which was passable the year round. By that time, however, the gold boom had died and the settlements were deserted. The country was not attractive for agricultural purposes, and hence for more than a decade the road was used only by Indians, lumbermen, and occasional trappers. Along the north shore of Lake Superior the land offered little more attraction for farmers. Yet as early as 1854 there was a trail extending from Minnesota Point as far as Beaver Bay. In 1857 the territorial legislature in a memorial to Congress asked for an appropriation for a military road, which, had it been built, would have passed along the shore of Lake Superior from Minnesota Point to Pigeon River. The petition was not granted, but in 1858 the Minnesota legislature authorized the opening of a road along the north shore to Beaver Bay. It was not until 1873 that a road to Pigeon River materialized, when an appropriation of \$1,500 from Minnesota's internal improvement fund was used to help St. Louis and Lake counties to open the road. ⁹

In the meantime the railroad had come to the aid

9. Primmer, in Minnesota History, 16: 295-297; Special Laws, 1868, p. 446-448, 1873, p. 314; General Laws, 1869, p. 119; ante, p. 112, 159.

of the pioneers in the conquest of the frontier. In 1862 the success of Minnesota visionaries in their long struggle against financial hardships was signalized by the opening of railroad service between St. Paul and St. Anthony on the St. Paul and Pacific Railroad. By the end of 1865 railroads were operating over 210 miles of road. Two years later the Minneapolis and Cedar Valley Railroad had completed its road to the Iowa line, where it connected with the McGregor Western Railroad, making possible an all rail connection with Chicago. By 1867 a railroad constructed westward from Winona had reached Waseca. Another railroad followed the Minnesota River in the general direction of the Mendota-Big Sioux road, which by 1867 had reached Le Sueur. From St. Paul and St. Anthony the branch line of the St. Paul and Pacific Railroad reached St. Cloud in 1866, and the construction of the main line westward from Minneapolis toward the Red River Valley near the junction of the Bois des Sioux and Otter Tail rivers was begun the following year. It was completed in 1871. Northward from St. Paul the Lake Superior and Mississippi Railroad extended toward Duluth, and the opening of service on this line in 1870 stilled the long plaint of the communities at the head of the lakes, for they at last had a through connection with St. Paul. But the construction of the line to Duluth also meant that the construction of another important rail link -- the Northern Pacific, authorized by Congress

in 1864 -- could be begun. By the end of 1872 this road had pushed westward across the wilderness, first to Brainerd near old Crow Wing, and then along the route of the Crow Wing trail to the Red River at Moorhead. So rapidly did Minnesota's railway system advance, that by the end of 1872 there were almost two thousand miles of railroad in operation in the state. By the end of the decade the mileage had increased to more than three thousand, and by the end of the century the latter figure¹⁰ was more than doubled.

The construction of railroads hastened the occupation of the frontier, for, in relation to the unsettled interior, the towns along the line of a railroad assumed a position similar to that which the river towns had held during an earlier age. Then the steamboats had brought settlers and supplies to the frontier. During the later period, when the frontier had moved beyond the reach of the river steamboat, the railroads reached to, and sometimes beyond, the frontier, and portions of the hinterland which had been inaccessible were readily reached by land-hungry settlers. On this new frontier, or series of frontiers, the processes of the advance of settlement were the same as those that had been enacted during the territorial period. Wherever the fron-

10. Message of Governor Marshall, January 10, 1868, in Minnesota, Executive Documents, 1867, p. 24; Railroad Commissioner, Reports, 1872, p. 42; Railroad and Warehouse Commission, Reports, 1900, p. 3.

tier was located, roads had to be opened before the wilderness was conquered. The story of the development of the trails about such a center as Alexandria during the late sixties and early seventies is essentially the same as that enacted in southeastern Minnesota during the fifties, and it was repeated in the regions farther west during the seventies and eighties. When the last frontier areas of northern Minnesota were settled during the closing years of the nineteenth century, the processes which those pioneers went through to open a system of roads were essentially the same as those experienced by their earlier counterparts.

In 1866 St. Cloud was the northern terminus of the St. Paul and Pacific Railroad. St. Cloud merchants anticipated great financial gains from that fact, and many of them believed that the town would develop into a wholesaling point rivaling St. Paul. At the celebration commemorating the completion of the railroad to St. Cloud they were warned that "the country to the west is ready to pour into this granary -- your town -- its surplus products to be transported to the great markets." ¹¹ St. Cloud was already the center for a large forwarding and freighting business, and the completion of the railroad increased activity in this field. Between three and four hundred wagons were employed in hauling supplies from the

11. St. Cloud Democrat, August 23, 1866.

end of the railroad to the government posts on the frontier, or to the posts of the Hudson's Bay Company during the season which began in May and continued into the early winter. In the spring of 1868 more than three hundred teams from St. Cloud were on the road at one time, and the passage of trains containing forty or fifty wagons were events so commonplace that they seemed scarcely worthy of mention. St. Cloud also was the point where the numerous small towns in the interior transshipped their supplies. The railroad brought these inland communities closer to civilization, and, with the establishment of new wagon roads which opened wide areas of agricultural lands to settlement, immigrants thronged in. For a distance of a hundred miles or more, merchants and businessmen turned to St. Cloud as the source of their supplies. ¹²

The settlers in the interior country were as keenly interested in building contacts with the railroad as the communities along the railroad were in making contacts with them. For the people in a town like Alexandria, located ninety miles from the railroad on the crooked stage road from St. Cloud to Fort Abercrombie, the problem of communication was important. They expected that the railroad would be extended beyond St. Cloud, but

12. St. Cloud Journal, September 13, 27, October 25, 1866, September 5, 1867, May 28, 1868; Sauk Centre Herald, May 14, 28, June 18, September 17, November 5, 1868, May 13, 27, 1869; Alexandria Post, May 5, June 5, 1869.

until it was actually built, they were dependent on the wagon roads. Consequently, they were intensely interested in improving the old road and opening new ones. The excessive cost of transporting goods by team as compared with transportation by rail, however, was the decisive factor in determining the towns to which the trade of the inland communities would flow. The editor of the Alexandria Post, in the spring of 1869, estimated that it cost twelve dollars to haul forty bushels of corn fifty miles by team, but that by railroad the same amount of grain could be hauled the same distance for only four dollars. More specifically, it cost Alexandria merchants \$1.25 to transport a hundred pounds of freight from St. Cloud to Alexandria. Therefore, when the construction of the main line of the St. Paul and Pacific Railroad westward from Minneapolis was begun, and it became apparent that the new railroad would pass a short distance south of Alexandria, these pioneers turned their attention in that direction. By October, 1870, the main line had reached Benson, only forty-eight miles from Alexandria. The ambitious Alexandrians were fully prepared for the event. Almost a year before they had cut out a new road to Benson and had made arrangements for the inauguration of stage service as soon as the railroad reached that point. Within a short time the stage line was operating on a daily schedule, and a large freighting business was carried on. The ties that

bound the community to St. Cloud were severed, because "in these railroad days the saving of forty-five miles of staging is a great object." 13

The ascendancy of Benson lasted less than a year. In the summer of the following year, the head of the railroad reached Morris, a point which was still closer to Alexandria. Immediately a new road was built to the latter town in order that the shortest route to the railroad might be utilized. Two years later the busy road to Morris had degenerated into a little-traveled country road, for the resumption of construction on the branch line had brought the railroad to Melrose, a point still closer to Alexandria. The construction of several modern grain elevators at Melrose, together with spirited competition between a number of grain dealers there, made that point a very favorable market for the wheat of the Alexandria country and provided an additional inducement for the traffic of the agricultural regions of western Minnesota to move in that direction. Thirty thousand bushels of wheat were received at the Melrose elevators in January, 1873, and much of it came from the Alexandria and Long Prairie country. Travel from Alexandria centered at Melrose for more than five years, for the panic of 1873 completely disrupted the building program of the St. Paul and Pacific Railroad. It was not

13. Alexandria Post, January 20, 1868, April 7, June 19, November 20, 1869, January 15, October 1, 15, 1870, March 11, May 27, 1871.

until 1878 that the construction of the railroad was resumed. On July 30 train service was extended to Sauk Center, and on November 15 the railroad finally reached Alexandria, ending that phase of the development of its communication system.¹⁴

While the people of Alexandria were so keenly interested in their own problem of developing lines of communication to the railroad, that community was itself the center toward which the country beyond it turned. For a decade Alexandria was the last town of any size on the westward road to the Red River Valley, and it became the market center for the settlers in the country beyond. For several years the flour mill at Alexandria was the only one in that portion of the state, and the pioneers who were building settlements such as Elizabethtown, St. Olaf, Clitherall, Otter Tail City, or Fergus Falls made regular pilgrimages to Alexandria for flour and feed. Many of them came forty or fifty miles for this purpose, but the appearance upon Alexandria's streets of twenty-five or thirty teams from the far-off settlement of Rush Lake, near present-day Perham in Otter Tail County, provoked the editor of the Alexandria Post to exclaim: "Think of it, ye dwellers in towns and cities, who all your lives have had your barrels of flour rolled to your doors -- one hundred and fifty

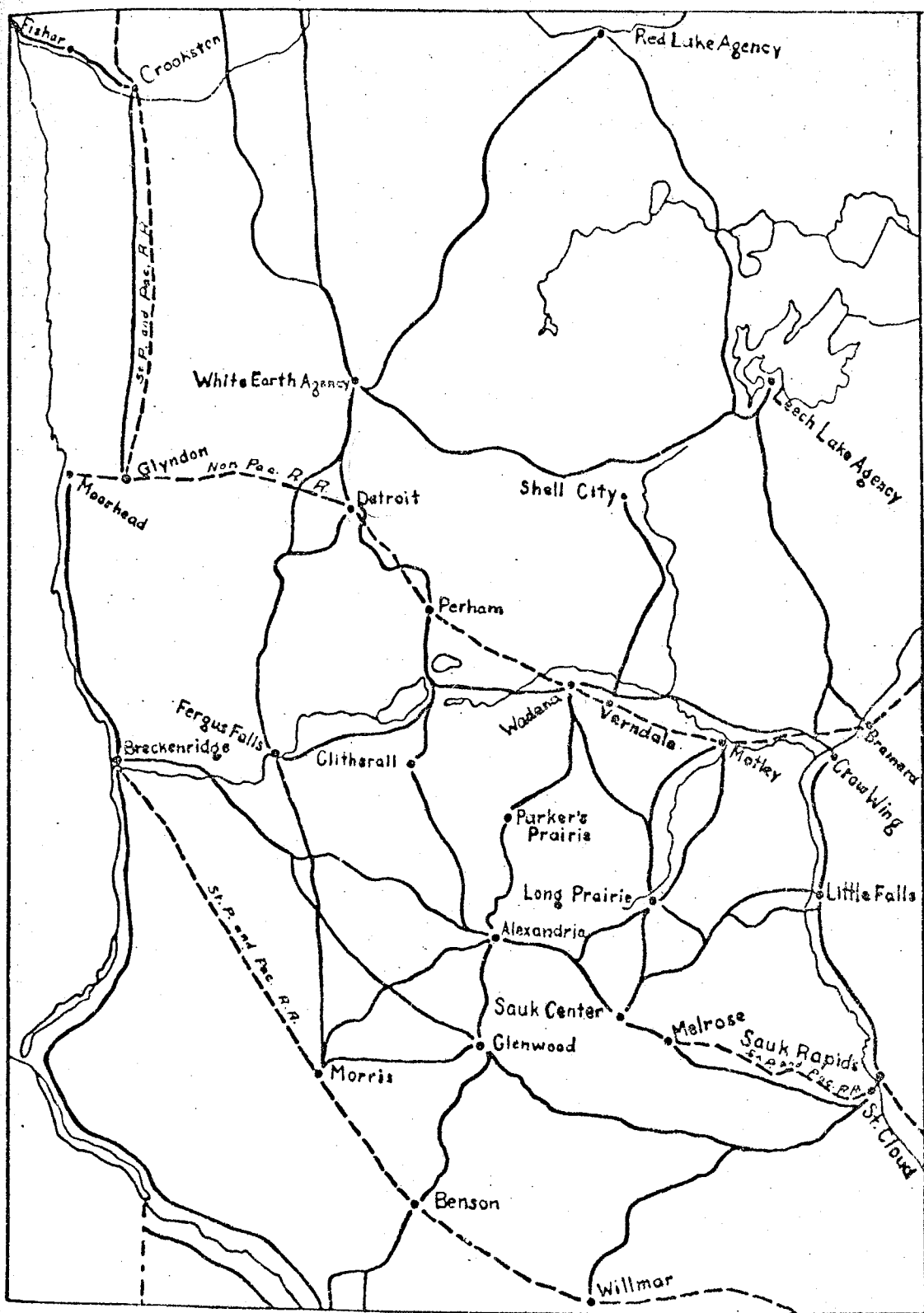
14. Alexandria Post, June 24, September 16, 1871, February 8, 15, 1873, August 2, November 15, 1878.

miles to mill." These remote communities watched the progress of railroad construction on both the Northern Pacific and the St. Paul and Pacific lines with no little interest. The beginning of railroad service on the latter line to Morris in 1871 divorced their trade from Alexandria, for it was the signal for the inauguration of a heavy freighting business and the establishment of a stage line over a newly opened state road from Morris to Fergus Falls, and the extension of these services over country trails to the other towns of the county. As soon as the railroad was completed to the town of Campbell, the road from Morris was forsaken in favor of a newer route to the nearest town on the railroad. Each community sought its nearest way to the railroad, and when the Northern Pacific Railroad reached this region, the towns along its route attracted the trade of the interior villages such as Otter Tail City and Pelican Rapids. While there was some competition between the two railroads for the trade of a community such as Fergus Falls, a commonsense compromise prevailed whereby each community sought its railroad over the route which was shortest and most easily traveled. 15

15. Alexandria Post, October 10, December 26, 1867, December 2, 1868, January 6, 1869; Sauk Centre Herald, June 11, 1868; Fergus Falls Advocate, April 29, June 3, 10, 17, July 1, December 23, 1871, March 9, 16, 1872, January 28, February 18, July 15, December 9, 1874; Otter Tail City Record, November 25, 1871; Special Laws, 1871, p. 345. The legislature in 1875 appropriated four hundred dollars to aid in the construction of a state

The construction of the Northern Pacific Railroad weaned away from Alexandria the trade of such communities as Rush Lake and Parker's Prairie. The trade of the former was irretrievably lost, for it was within a few miles of the railroad. The people of Parker's Prairie were somewhat more remote from the railroad, but they at once undertook the task of opening roads northward. In the fall of 1871 they completed their new road, which led to Wadena, and in 1874 the legislature authorized the location of a state road between the two towns and appropriated seven hundred dollars to be used for building bridges across the streams along the way. Over this road a stage line was operated and a heavy traffic in wheat was carried on. The alienation of the trade of Parker's Prairie was not allowed to occur without a contest on the part of Alexandria, however, for the same session of the legislature which authorized the opening of the road to Wadena, authorized a state road to be laid out from Alexandria to Parker's Prairie. The distance to Alexandria was shorter than that to Wadena, and, had all other conditions been equal, Alexandria logically should have drawn the trade of the

road from Frazee to Pelican Rapids, thus assuring the former place of the trade of Pelican Rapids. See Special Laws, 1875, p. 413. Alta Kimber, in "The Coming of the Latter Day Saints in Otter Tail County," in Minnesota History, 13: 391 (December, 1932), relates that the settlers at Clitherall hauled their grain to Cold Springs, near St. Cloud, to have it ground into flour.



ROADS OF WEST CENTRAL MINNESOTA IN 1878

Parker's Prairie country. But even when the railroad reached Alexandria in 1878, trade continued to flow to Wadena, because the road to that place was much better than that to Alexandria. The efforts of Alexandria merchants to construct a good road were of no avail, and the grain trade of Parker's Prairie flowed to the Northern Pacific town of Wadena. 16

The Northern Pacific towns monopolized a large share of the trade of Todd County, drawing from a territory extending as far southward as Long Prairie. Before the removal of the Winnebago agency from Long Prairie, a military road had led from the Mississippi River near Little Falls up the valley of the Swan River to Long Prairie, and as early as 1852 a trail had led into the Long Prairie region from the Sauk Valley. When settlement got under way in the late sixties and early seventies, however, it was concentrated in the valley of the Long Prairie River, and it was over two roads, one on each side of the river, which led from the Northern Pacific town of Motley to Long Prairie, that settlers came into the county. During the fall

16. Otter Tail City Record, November 4, 1871; Wadena Tribune, March 10, 1877, March 30, October 5, 1878; Alexandria Post, July 4, October 10, 1879, August 5, November 25, 1881; Special Laws, 1874, p. 309, 395. In 1876 the legislature authorized the opening of a road from a point on the Long Prairie River south of Parker's Prairie to the state road from Parker's Prairie to Wadena, thus weaning away still more of the trade of the Alexandria merchants. Special Laws, 1876, p. 195.

of 1873 a new road between Sauk Center and Long Prairie was opened, partly by county action and partly by the co-operative action of the people living along its route, and over this road a mail and passenger stage line was established, which later was extended along the river roads to Motley. By the middle seventies, the Long Prairie country had become a wheat growing region of considerable importance, and the rough prairie roads were depended upon to bear the grain to the railroads. 17

During the unusually wet season of 1873, the Todd County roads became quagmires, and the bogged-down grain growers sought for other means of transport. In 1870 a contractor furnishing timber supplies for the Northern Pacific Railroad construction crews had built a flat boat, called the "Black Maria," upon which he transported his cargoes down the Long Prairie River. This boat, and another of similar design, were adapted for use in transporting grain from Long Prairie to Motley. It was not a great deal more economical than hauling by team had been, for the average cost of the trip was about twenty cents per bushel of wheat, and that was what teamsters estimated the cost of "wagoning on good roads" to be, but the existing roads were so bad that

17. Ante, p. 51; Minnesota Pioneer, February 19, 1852; Alexandria Post, December 18, 1869; Sauk Centre Herald, December 1, 1870, September 14, 21, 28, 1872, January 4, October 18, 1873, December 26, 1874, March 3, 1877, March 14, 1879.

it was practically the only way in which the grain could be got to market. The enthusiastic frontier navigators decided that if a steam engine were installed on one of the flatboats, it would be possible to make the return trip in much less time and with less expense. In the spring of 1875, therefore, a steamboat appeared on the little Long Prairie River and made a number of trips back and forth to Motley hauling wheat and supplies. Unfortunately, however, the river was high enough to float the steamboat only during a few weeks in the spring and a month in the fall, and navigation was hindered by a tortuous channel and numerous obstructions. The legislature of 1875, therefore, was prevailed upon to appropriate \$2,000 to clear the channel. Drier seasons followed, however, and the roads improved so much that the steamboat venture was given up. The boat lay on the sandy beach of the river at Long Prairie for several years thereafter. 18

Gradually a system of roads into the Long Prairie region was developed. In 1871 a new road from Little Falls to Sauk Center, which the legislature had author-

18. Sauk Centre Herald, October 20, 1870, June 20, December 5, 26, 1874, April 3, May 29, July 3, 31, 1875, June 24, 1876; Special Laws, 1875, p. 405. The Fergus Falls people embarked on a similar experiment in 1873 and 1874 with better success. A fleet of barges was constructed to haul flour and lumber to Fort Garry, and in the summer of 1873 a steamboat was navigated on the Otter Tail River. Fergus Falls Advocate, February 19, 26, March 19, August 27, October 8, 1873.

ized in 1867, was opened in order that the drouth-stricken farmers of the Little Falls region might exchange lumber for grain which was raised in large quantities in the southern portion of Todd County. The road facilitated the settlement of that large area between Sauk Center and Little Falls, as well. During the last part of the seventies, a state road from Wadena to Long Prairie, following the east bank of the Wing River, was built, providing a new road to communities such as Hewitt, Eagle Bend, and Browerville. For the northern portion of the county, the natural outlet remained the Northern Pacific towns, but the completion of the St. Paul and Pacific to Sauk Center during the summer of 1878 had the effect of drawing to that town the trade from the southern portion of the county. Until a railroad was built from Sauk Center to Wadena in the summer of 1891, however, the communication system of Todd County was based upon the development of a series of wagon roads extending north to the Northern Pacific and south to the St. Paul and Pacific railroads. 19

Directly north of the Long Prairie region lay another fertile area of prairie and timberland which was made accessible to settlers by the construction of the Northern Pacific Railroad. The Shell prairies,

19. Sauk Centre Herald, July 15, 1871; Wadena Tribune, May 26, August 4, 1877; Special Laws, 1867, p. 329, 1877, p. 276-278.

three in number, were located about ten miles farther north of the railroad than Long Prairie was south of it. It was possible to reach this region by wagon before the Northern Pacific Railroad was built westward from Brainerd, but the route lay by a roundabout way, following the government road from Crow Wing to Leech Lake, which was opened in 1855, and thence along the rough wagon road made in 1870, when the Chippewa Indians were removed to the White Earth agency. This latter trail skirted the northern edge of the middle prairie, near present-day Park Rapids, and crossed the third prairie from east to west near Osage. In 1872 the agent at White Earth opened a road to the railroad at Detroit, by following which, it was also possible to gain access to the Shell prairies from the railroad. Both routes were long and circuitous, however, and the uncertain nature of the roads kept the region from becoming popular. Until the late seventies, therefore, the Shell prairies remained unsettled. ²⁰

During the winter of 1878 a few pioneers explored a route for a road northward from Verndale to the Shell prairie region. It was a rough and stumpy road which they cut out for spring travel, but it was a more direct route. During the next two years settlers thronged toward the prairies, but the bad roads were a serious

20. Ante, p. 90, 100, 115-117.

hindrance to immigration. One would-be settler, tarrying at Wrightstown in the spring of 1880, wrote to a friend in Alexandria that numerous settlers were making their way to the Shell prairies, but that "others are returning, uttering the most bitter curses against the country, all owing to such bad roads." The editor of a Park Rapids newspaper wrote, "A ride . . . over the present road is not a delightful trip." Forty miles or less separated the Shell prairies from the railroad, but over the roundabout road the distance was about sixty miles.²¹ In 1881 a new road to the Shell prairie country was opened from Detroit by one of the county officials of Becker County who undertook on his own initiative to locate this road. When he demonstrated that a road could be made, the county commissioners appropriated four hundred dollars of county funds for that purpose. The only possible route was also a roundabout one, winding among the lakes of Becker County, but it was many miles shorter than the old road through White Earth. Its construction made it possible to travel from Park Rapids to Detroit by team with little more difficulty than attended a journey from Park Rapids to Verndale.²²

In the meantime the citizens of Wadena were view-

21. Park Rapids Enterprise, July 25, October 26, 1882; Wadena County Tribune (Verndale), April 19, 1879; Alexandria Post, August 8, 1879, June 25, 1880.

22. Park Rapids Enterprise, August 17, 1882; Alvin H. Wilcox, A Pioneer History of Becker County, Minnesota, 654-659 (St. Paul, 1907).

ing the development of this new region with considerable interest. The wheat trade flowing to Verndale was an inducement to them to make efforts to open a road to divert at least a portion of this traffic to their town. Accordingly, the merchants of Wadena contributed privately to a fund for the construction of a road to tap the Verndale road about a dozen miles north of town. Their first effort to obtain the Shell prairie trade was not successful, for they failed to build a better road or to shorten the traveling distance. In 1883, however, construction of a new road was begun which would shorten the distance materially. That the opening of this new shorter route was welcomed by the Shell prairie residents is demonstrated by their willingness to help to construct it. They built not only the portion that ran through Hubbard County, but also two miles of it in Wadena County. The completion of the road was greeted as "certainly a great improvement on all the old roads, being fifteen miles shorter, and a far better road to travel over." It saved freighters an extra day of traveling, and made Wadena the nearest point on the railroad. A stage line was put into service over the new road, and one proud citizen who traveled in a private conveyance boasted that he had covered the distance in a little more than six hours, a remarkable feat in comparison with the previous average time of fourteen hours on the road between Park Rapids and Verndale. Commercially,

the road was profitable for Wadena, for the wheat trains which formerly had traveled to Verndale now made Wadena the terminus of their journey. In response to the wondering comment of a Wadena editor on the increased number of Park Rapids visitors in town, the Park Rapids newspaper replied, "We can tell our Wadena neighbors -- if they do not already realize the fact -- that this highway they have cast up will be a very good thing for them." ²³

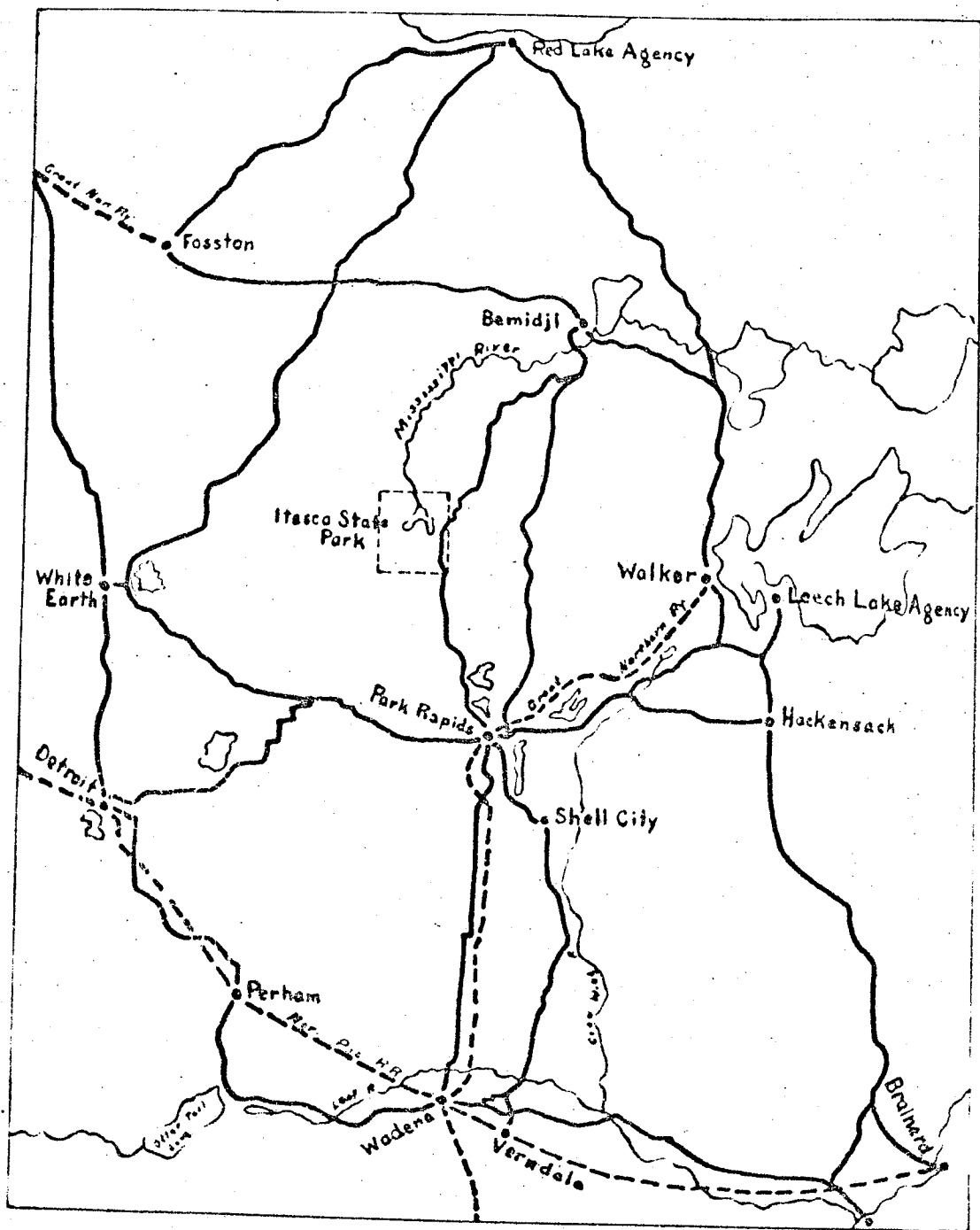
Eager as the settlers of the Shell prairies were to improve their wagon roads, their primary concern was that of obtaining a railroad. In the fall of 1883 their plans seemed about to materialize, for a preliminary survey of the route between Wadena and Park Rapids was made. Then the plan collapsed. In desperation these residents of an inland community resorted to the same expedient that the settlers in the Long Prairie district and those of Fergus Falls had tried a decade earlier. They built a steamboat -- the "Lotta Lee" -- to be navigated on the Shell River, which they launched with great ceremony in the summer of 1884. It made one trip down the river to Motley, but it never returned, the obstacles to navigation being too great. The railroad outlook continued to be dim throughout the decade, but on August 1, 1891, the inauguration of regular train service over the

23. Park Rapids Enterprise, August 17, 1882; Hubbard County Enterprise (Park Rapids), August 10, 1883, May 1, 1885, October 19, 1888, May 10, June 28, July 5, 26, August 2, 1889.

Sauk Rapids-Park Rapids branch of the Great Northern Railroad gave the community the outlet it needed. The wagon roads to Wadena and Verndale faded into obscurity, degenerating into country roads over which the farmers along their routes brought their grain to the railroad, or over which an occasional settler, who preferred to migrate by wagon, made his way. ²⁴

Park Rapids had had some intercourse during the early years of the eighties with the Indian agency town on Leech Lake. It was restricted by the fact that the distance from Leech Lake to Brainerd was as short as that to Wadena or Verndale by way of Park Rapids, and since all three towns were located on the railroad, there was little reason for blazing out a new road for trade to follow. The completion of the Great Northern Railroad to Park Rapids changed the entire picture, however, and after 1891 that town was the point which the people of the agency town patronized. With the completion of the railroad, too, the process of settlement in the region got under way. The harvesting of the lumber crop was hastened, and gradually an agricultural settlement began. By the fall of 1892, a mail-stage line was put into operation between Park Rapids and the town of Leech Lake over the old agency road between Leech Lake and White Earth. A road was opened to the country

24. Hubbard County Enterprise, October 19, November 2, 1883, August 8, 1884, July 31, August 6, 1891.



ROADS OF NORTHWESTERN MINNESOTA ABOUT 1895

The first part of the document discusses the importance of maintaining accurate records of all transactions. It emphasizes that proper record-keeping is essential for the integrity of the financial system and for the ability to detect and prevent fraud. The document also outlines the responsibilities of individuals involved in the process, including the need for transparency and accountability.

The second part of the document provides a detailed overview of the various methods used to collect and analyze data. It describes the different types of data sources, such as surveys, interviews, and focus groups, and explains how this information is used to identify trends and patterns. The document also discusses the challenges associated with data collection and analysis, such as ensuring the reliability and validity of the data.

The third part of the document focuses on the development of effective communication strategies. It discusses the importance of clear and concise communication and provides guidelines for writing reports and presentations. The document also outlines the need for ongoing communication and collaboration between all parties involved in the process.

The fourth part of the document discusses the importance of monitoring and evaluating the progress of the project. It describes the different methods used to track progress, such as regular meetings and progress reports, and explains how this information is used to identify areas for improvement. The document also discusses the challenges associated with monitoring and evaluation, such as ensuring that the data is accurate and that the project is on track.

The fifth part of the document discusses the importance of maintaining the confidentiality of the data. It describes the different methods used to protect the data, such as encryption and secure storage, and explains how this information is used to ensure the privacy of the individuals involved. The document also discusses the challenges associated with maintaining confidentiality, such as ensuring that the data is not shared with unauthorized parties.

The sixth part of the document discusses the importance of ensuring the ethical integrity of the project. It describes the different methods used to ensure ethical integrity, such as obtaining informed consent and following ethical guidelines, and explains how this information is used to ensure the rights and welfare of the individuals involved. The document also discusses the challenges associated with ensuring ethical integrity, such as ensuring that the data is not used for purposes other than those intended.

The seventh part of the document discusses the importance of ensuring the sustainability of the project. It describes the different methods used to ensure sustainability, such as developing a long-term plan and securing funding, and explains how this information is used to ensure the project's long-term success. The document also discusses the challenges associated with ensuring sustainability, such as ensuring that the project is financially viable and that it has the necessary resources to continue.

The eighth part of the document discusses the importance of ensuring the transparency of the project. It describes the different methods used to ensure transparency, such as providing regular updates and holding public meetings, and explains how this information is used to ensure the project's openness and accountability. The document also discusses the challenges associated with ensuring transparency, such as ensuring that the information is accurate and that it is accessible to all parties involved.

The ninth part of the document discusses the importance of ensuring the accountability of the project. It describes the different methods used to ensure accountability, such as establishing a clear chain of command and holding individuals accountable for their actions, and explains how this information is used to ensure the project's integrity and success. The document also discusses the challenges associated with ensuring accountability, such as ensuring that the individuals involved are qualified and that they are held to the same standards as everyone else.

The tenth part of the document discusses the importance of ensuring the effectiveness of the project. It describes the different methods used to ensure effectiveness, such as setting clear goals and objectives and regularly evaluating progress, and explains how this information is used to ensure the project's success. The document also discusses the challenges associated with ensuring effectiveness, such as ensuring that the project is well-planned and that it has the necessary resources to succeed.

lying far to the north, and an increasing number of settlers began to settle in the Itasca State Park region and, farther north, in the community about Lake Bemidji, which hitherto had procured supplies from Fosston, almost a hundred miles to the northwest. The opening of this road was characterized as a "wise investment" for Park Rapids, and the chronicling of arrivals from these two regions seemed to bear out the claim. The surveying of a straighter and shorter road in the late fall of 1894 further facilitated the development of the agricultural resources of the country, and, by making Itasca State Park more readily accessible, facilitated the exploitation of the recreational resources at the head of the Mississippi. 25

The settlement of the prairie regions of southwestern and western Minnesota moved more slowly than those of the wooded central and eastern part. Pioneer accounts show that, although a few settlers usually had migrated into the prairie frontier in advance of the railroad, it was only when the railroads had established lines of communication that the prairie counties boomed. Towns such as Marshall, Windom, and Worthington were railroad towns, and many of them were laid out by the railroad companies themselves. The remoteness of the prairie counties from navigable waters upon which to

25. Hubbard County Enterprise, October 21, 1892, January 6, 1893, June 1, July 27, December 14, 28, 1894.

float their products to market was one reason for their retarded development. More important is the fact that the presence of materials for building purposes was a vital factor in the settlement of new regions, and these were lacking on the prairies. While sod shanties presented a possible solution to the problem of providing shelter for man and beast, they were temporary and, at best, unsatisfactory. Until some economical means was devised for bringing to the prairies the materials for building purposes, and for bearing from them the crops of wheat, the special product of the Northwest, settlement lagged. Wagon roads did not satisfy this requirement satisfactorily, for distances were too great. The solution for the transportation problem was provided by the railroad, which became the chief settlement agency of the prairies. 26

The pioneers who attempted to settle a prairie region such as that about Jackson, found that their problems were numerous and difficult. Settlement in that region had begun prior to the admission of Minnesota to the Union, but successive setbacks, such as the Inkpaduteh massacre, the panic of 1857, the Civil War, and the Sioux outbreak in 1862, effectively checked its growth. Jackson had one advantage over most of the

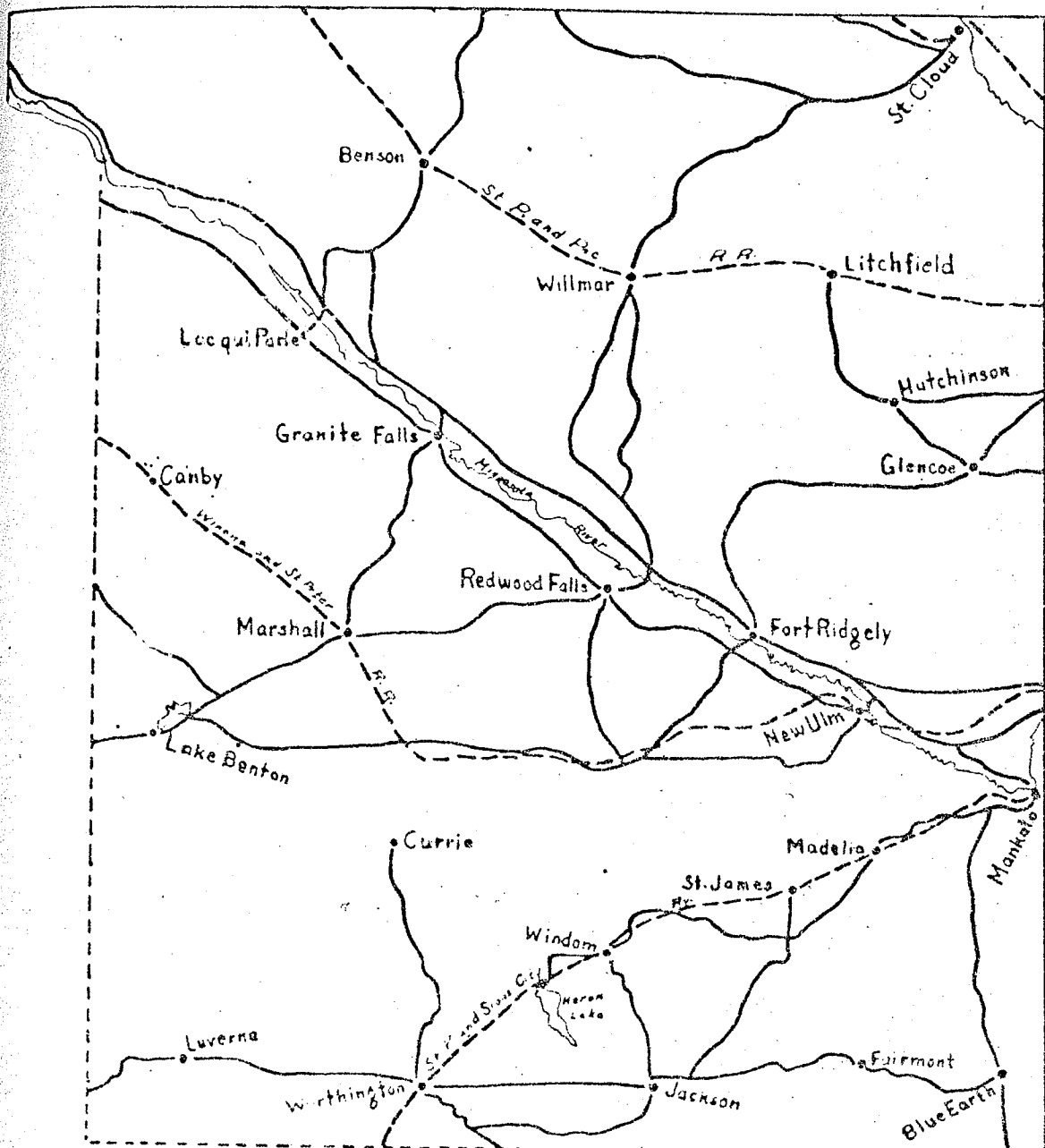
26. For a discussion of this problem, see Agnes M. Larson, "The Golden Age of Lumbering in Minnesota," in Minnesota Alumni Weekly, 32: 438 (April 15, 1933) and Larson, The Wheat Market and the Farmer, 55-60.

prairie communities, and that was its proximity to settled areas, both in Minnesota and Iowa. Consequently, it did not suffer from the effects of poor communication facilities to as great an extent as did those farther west. Yet this community, though close to the borders of civilization, had to depend for its mail service upon an uncertain weekly delivery made on horseback across the prairie from Emmett, Iowa. Gradually prairie roads were opened, and by 1870 mail communication had been established by way of Fairmont and Madelia as well. Even so, the Jackson people complained that in the spring and in rainy seasons they sometimes had to go two weeks, and often much longer, without mail service, because the unbridged prairie streams, ordinarily mere creeks, became raging torrents. The construction of the St. Paul and Sioux City Railroad, during the early seventies, brought this community within reach of the railroad. As railroad construction progressed, a new stage service was begun between the nearest railroad towns and the interior village. From Madelia, the head of the railroad moved to St. James, and finally to Windom, scarcely twenty miles from Jackson. The construction of the railroad through southwestern Minnesota brought improved mail facilities for the community, it hastened the occupation of the lands within Jackson County, and, above all, it made practicable the establishment of a lumber yard, thereby satisfying a need that had

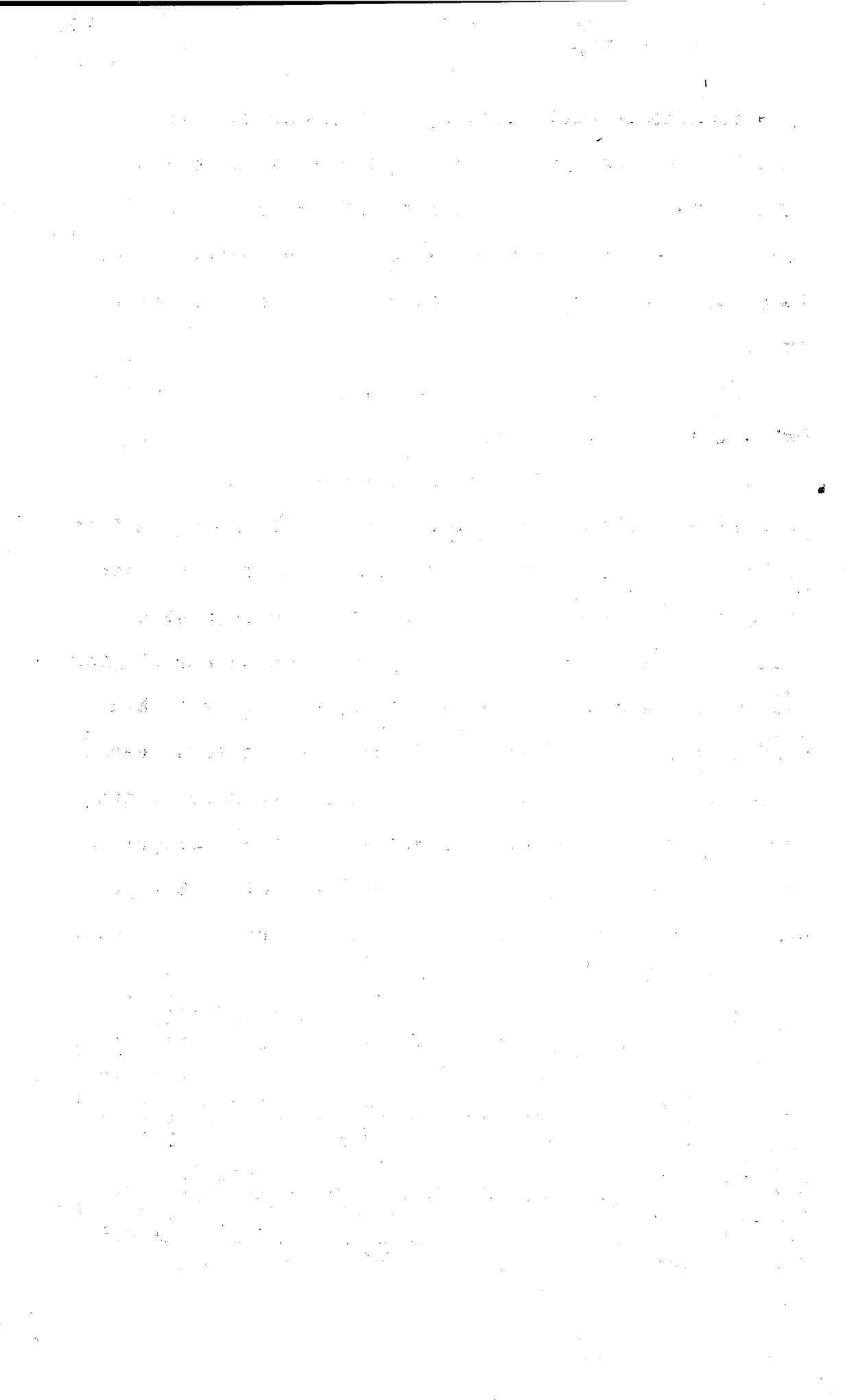
"long been felt by the citizens." 27

The pioneer settlers who moved into the prairie counties, after the railroads had shown them the way to solve their transportation problem, found that their tasks were the same as those which confronted their brethren in the wooded areas. From the railroad towns outward, settlement spread as rapidly as a system of trails could be opened, and in the interior country, thirty, forty, or fifty miles from a railroad, settlements bloomed which were dependent for their supplies, including the greatly valued lumber, upon the railroad towns. Thus Marshall, on the Winona and St. Peter Railroad, was the source of supplies for communities as remote as Lake Benton and Lake Shetek. The town of Lac qui Parle, in spite of its location near the Minnesota River, found its markets over roads leading northward to the St. Paul and Pacific Railroad town of Benson, or southward to Canby on the Winona and St. Peter Railroad. The town of Windom, established in 1871 on the St. Paul and Sioux City Railroad, became the market town for the frontier community of Jackson. Worthington, which had been a straggling settlement named Okabena receiving its mail

27. Jackson Republic, April 8, 15, 22, 29, May 5, October 8, 1870, April 8, 15, 22, 29, May 20, September 22, 1871, January 6, July 27, December 14, 1872. The legislature in 1868 authorized the opening of a road from Blue Earth City to Jackson, and the following year one from Madelia to Jackson. Special Laws, 1868, p. 452, 1869, p. 322.



ROADS OF SOUTHWESTERN MINNESOTA IN 1875



by a roundabout route leading through Jackson, became a market of prime importance after the railroad was built through it in 1872, and by 1874 a network of roads led to it from settlements as far away as Spirit Lake, Iowa, or Minnehaha County, South Dakota, or the lower end of Lake Shetek. 28

In all the southwestern counties the roads were bottomless quagmires after rainy seasons, and during the drouth of summer the deep dust made them almost equally bottomless, so that it was "difficult for a team to draw a load of wheat" over them. The road from Worthington to Luverne, over which two or three hundred teams traveled each week, "bringing grain to Worthington and taking back lumber and supplies," was in such bad condition during the spring of 1876, that several teams whose drivers ventured over it, "were five hours coming three miles." To remedy the situation it was suggested that the lumber dealers and grain buyers of Worthington, who profited most from the trade of the outlying communi-

28. Lac qui Parle County Press (Lac qui Parle), January 4, February 22, 1873, September 17, 1874; Prairie Schooner (Marshall), August 23, 1873, March 12, December 21, 1874; Windom Reporter, September 7, 21, 1871, February 1, May 2, 1872; Western Advance (Worthington), May 23, September 5, 1874; Worthington Advance, October 17, 1874, March 12, June 23, 1875, May 18, June 15, 1876; Jackson Republic, April 22, 1871; L. R. Moyer and O. G. Dale, History of Chippewa and Lac qui Parle Counties, Minnesota, 1: 377, 378, 477 (Indianapolis, 1916); Arthur P. Rose, An Illustrated History of the Counties of Rock and Pipestone, 48, 52, 70 (Luverne, 1911).

ties, should combine to place teams and men at work to repair the roads. The editor of the Windom Reporter, after he had made an exploratory journey over the road to Jackson, called the road "a rough and hard one to travel." He complained of the necessity for frequent pauses to rest his horse, and of the constant danger of being thrown from the animal as it attempted to travel over the deeply rutted route.²⁹ Local enthusiasts claimed that "the mere earth, with a few inexpensive culverts here and there, will make a capital road in any direction," but they hailed the construction of railroads as a welcome substitute. A historian of Lac qui Parle County, for example, after recording that early settlers had to travel sixty miles or more by ox team to have their grain ground, remarks that the construction of the railroad to the county in 1884 "changed the entire course of history for Lac qui Parle County, and opened up for it a new era of commercial and agricultural importance."³⁰

In the Red River Valley, that other great prairie region of Minnesota which came under the dominion of the plow in the latter portion of the nineteenth century, somewhat different conditions prevailed. The Red River

29. Western Advance, March 14, 1874; Worthington Advance, October 17, 1874, June 18, October 1, 22, 1875, March 16, June 1, 1876; Windom Reporter, September 21, 1871.

30. Western Advance, March 14, 1874; Moyer and Dale, Chippewa and Lac qui Parle Counties, 1: 378, 478.

trails, worn by the carts of several generations of Red River traders, gave access to this fertile area through three main routes: one up the Minnesota Valley to Big Stone Lake and Lake Traverse; another up the Sauk Valley to the confluence of the Bois des Sioux and Otter Tail rivers; and the third over what was known as the Crow Wing trail. When settlement in the Red River Valley began, each of these became important means of entering the country. 31

During the winter of 1857 a contract was made between the Minnesota Stage Company and the Hudson's Bay Company for the transportation of the supplies of the great trading corporation from St. Paul to the company posts along the Red River. Subsequently Anson Northup -- pioneer lumberman, hotel man, steamboat navigator, and promoter generally -- transported the hull and engine of a little steamboat, which he had been operating on the Mississippi River above the Falls of St. Anthony, across the western plains from Crow Wing to Georgetown during the bitter cold of a Minnesota winter. In the spring of 1859 he assembled his boat on the Red River and inaugurated steamboat navigation on those western waters. The Minnesota Stage Company, on its part, opened a stage road from St. Cloud, up the valley of the Sauk River, to the Red River at Georgetown, where

it made contact with the steamboat. Purchasing the boat from Northup, the company inaugurated a combination stage-boat and wagon-boat passenger and freight service to the British dominion. 32

Little settlement accompanied this extension of communication westward. To be sure, a number of town-sites were staked out, and a few settlements such as those at McCauleyville and Georgetown were begun, but agricultural development was almost lacking, and the growth of settlement was exceedingly slow. A part of this can be attributed to the sequence of events which slowed down the process of settlement in Minnesota generally during these years -- the panic of 1857 and the accompanying depression, the outbreak of the Civil War, and the Sioux uprising of 1862. A more important factor in the slow growth of settlement in the valley was its remoteness from the settled areas of Minnesota, for land close to settlements attracted homeseekers first. For almost twenty years, therefore, the route between American and British settlements remained essentially a trade route; it was not a pathway for settlement.

Three of the railroad lines chartered by the Minnesota legislature reached into the valley of the Red River. The main line of the St. Paul and Pacific tapped the valley at Breckenridge, providing access through the

32. Larsen, in North Dakota Historical Quarterly, 6: 46-48.

southern gateway, as had the Minnesota Valley trail of an earlier day. The St. Paul and Pacific branch line, which reached St. Cloud in 1866, came to the Red River Valley through the Sauk Valley route, and then extended northward the entire length of the valley to the Canadian border opposite Pembina. The Northern Pacific Railroad, beginning at Lake Superior, followed the route of the old Crow Wing trail from Brainerd to Detroit, then, turning westward, crossed the Red River at Moorhead. The main line of the St. Paul and Pacific reached the Red River Valley in 1871, and it was followed in 1872 by the Northern Pacific. The coming of the railroads was the signal for a burst of activity in trade and a brisk immigration to the lands adjacent to them. In anticipation of a large increase in trade, the Minnesota Stage Company in the summer of 1871 opened a stage line toward Fort Garry. By the middle of June the line, running on the Dakota side of the river, was opened to a point forty miles north of Georgetown, named Frog Point, and service to Fort Garry was begun on September 11. ³³

The opening of the stage line stimulated the growth of communities such as Fisher's Landing, located on the Red Lake River a short distance above its mouth, which had been established a short time after the beginning

33. Larsen, in North Dakota Historical Quarterly, 6: 25-57.

of steamboat navigation on the Red River. For the most part, however, these communities were either wood stations for boats or stage stations, where relays of horses were obtained or passengers were put up for the night. The principal interest of the settlers, therefore, was not agricultural, but commercial. In 1872 the St. Paul and Pacific Railroad, without waiting for the completion of the branch line between St. Cloud and the Red River, began construction on the Pembina branch northward from the Northern Pacific Railroad at Glyndon. The branch reached Warren that fall, but the panic the following year struck with devastating force, and all thought of completing the line to the international boundary was dropped. Train service over the branch was intermittent and unprofitable, and, as a result, service over the northern portion was abandoned during the trying period. Indeed, the track on the portion of the branch line extending beyond the Red Lake River was taken up and the iron used for constructing a short branch westward to Fisher's Landing. The construction of the branch line, however, resulted in the migration of a considerable number of pioneer farmers into that portion of the valley. North of the railroad, settlement remained dormant; along its line, communities such as Crookston, Ada, and Glyndon grew up.

During the late seventies a movement of population into the Red River Valley began. It was fostered by

the railroad companies, for they wished to dispose of their lands, and to this end they hastened the completion of the branch line to the international boundary. But in addition to the railroad, there was another factor which aided in opening this vast area. In 1879 the legislature appropriated a thousand dollars from the internal improvement fund for the construction of a wagon road from White Earth to St. Vincent, across from Pembina. The road followed almost exactly the route of the eastern trail to the Red River settlement worn by the carts of the traders almost half a century earlier. At White Earth it joined the Detroit-Red Lake road, for the construction of which the federal government had appropriated funds in 1873 and 1874. It was the connecting link that made feasible communication by wagon with the interior portion of the Red River Valley. Immigrants poured in by the hundreds in the period following the opening of this road and of the railroad, some by train, some by boat, but more by prairie schooner, to take up land, and settlement reached inland the whole length of the valley. By the beginning of the eighties, the wheat growers of the Red River Valley had gained national recognition, and the fame of the bonanza farms in that fertile area was widespread. In 1880 the elevators at Fisher's Landing alone shipped to Minneapolis 570 car-loads of wheat, and other stations along the route of

the St. Vincent extension of the railroad made correspondingly heavy shipments. ³⁴

In the agricultural development of the Red River Valley, the construction of a long-distance network of wagon roads played, on the whole, an inconspicuous part. For that region, the railroad was the essential element that made for settlement; the wagon road was supplementary to it. The wagon road opened the way into the valley, but it was the railroad which, by providing a means of rapidly and economically moving to market the bumper crops of hard spring wheat, furnished the spark for setting off the overwhelming movement of settlement into the area. Without the wagon road, many farmers, perhaps, would not have ventured into the valley; without the railroad, few of them would have been able to remain, for their bumper wheat crops would have been of little value if they had had to pay the heavy toll of trans-

34. Fisher's Landing Bulletin, May 22, 29, 1880; Special Laws, 1879, p. 375-377; report of the state auditor, 1879-80, in Minnesota, Executive Documents, 1880, vol. 1, p. 274. A part of the slowness with which the Red River Valley was settled may be explained by the fact that a controversy was raging between the Northern Pacific and the St. Paul and Pacific railroads over the title to a huge tract of land which both claimed under the terms of their land grant charters. Until that dispute was settled in 1878 little land in the Red River Valley was opened to settlement, for much of it was owned by the companies. Return I. Holcombe and William H. Bingham, eds., Compendium of History and Biography of Polk County, Minnesota, 63-67 (Minneapolis, 1916); History of the Red River Valley, Past and Present, 1: 222, 232 (Grand Forks and Chicago, 1909).

portation to market by team.

Occasional references are found in contemporary newspapers to the long distances which some farmers traveled in order to reach the local wheat market, but the great preponderance of references regarding roads are to those within the township, or to those in adjacent townships, and the problems of maintenance and construction from the first were relegated to positions of purely local concern. One reason for this disinterest in roads is that the agriculture that developed in the Red River Valley during the seventies and eighties was of a big-scale kind. Farmers owning a section of land upon which a crop of wheat was growing were not inclined to be concerned about road conditions. It was a comparatively easy matter for them to get a railroad company to put in a convenient sidetrack upon which they and their neighbors could load their wheat directly into cars. Their need for roads was greatest at the time of marketing, which was ordinarily in the late summer and autumn, when roads in that area were at their best. Furthermore, settlement was comparatively sparse, and sparsely settled communities usually find it difficult to construct and maintain adequate systems of roads. On the open prairie, moreover, it was a simple task to lay out a way to market along the section lines. It was only when rainy spells occurred that the necessity

for improved roads was felt, and then a cursory going over of the worst spots sufficed. 35

In general, the railroad and wagon road complemented one another throughout the latter period of the conquest of the frontier. The railroad town was a center to which the wagon roads led, drawing to the railroad the commerce of a wide surrounding area. The sequence followed during the extension of the frontier into the Sauk Valley, into the Long Prairie region, into the Shell prairies, and, toward the close of the century, into the Bemidji area, was followed in virtually every community that came under the dominion of the plow or the lumberman's ax during the latter years of the nineteenth century. The railroads, performing the same function for the frontier that the navigable rivers had performed, penetrated ever deeper into the interior, where they had been preceded by a series of frontier trails. When the frontier was sufficiently well developed to support a railroad, the iron horse replaced the stagecoach and freight wagon, while the wagon roads, which formerly had carried the life blood of the frontier community, became simple country roads. They were no longer needed to supply the communication needs of a frontier settlement. In their stead, the railroad brought in the mail and supplies and carried away the produce of the newly opened land.

35. Northern Tier (Crookston), October 25, November 15, 1879; Fisher's Landing Bulletin, May 22, 29, June 26, 1880; Fisher Bulletin, June 4, October 29, 1881.

VI. ROAD LEGISLATION DURING THE TERRITORIAL PERIOD

Frontier road-making methods were crude and makeshift. Often they consisted merely of removing a few trees or boulders, or of filling the worst swamps with brush or logs and covering the rough causeways with a few spadefuls of dirt. The task of improving the roads so that they could bear the commerce of a rapidly developing frontier country was as difficult as that of making the first roads, for money and labor were still scarce. Frontier roads were laid out wherever a practicable route could be found, for most landowners were so greatly pleased to have access to roads that they freely granted a right of way for them. But to insure some uniformity in road construction and to provide some method by which the rough frontier trails could be kept in a passable condition, it was necessary to evolve a set of rules and regulations.

Under the terms of the organization act, passed on March 3, 1849, the laws of Wisconsin Territory were made effective in the territory of Minnesota, thereby continuing the tutelage of Wisconsin over the new territory. The inheritance from Wisconsin was more extensive even than that, for the Minnesota country also had the benefit of a decade's experience as a part of St. Croix

County, and the seat of the Wisconsin county was located in the Minnesota town of Stillwater. To the inheritance of a body of laws, therefore, was added that of a unit of local government. It fell upon the shoulders of Alexander Ramsey, who was appointed governor of Minnesota Territory, to put the laws into operation, and it was he who called for the election of representatives to the territorial legislature, which, meeting in St. Paul in September, 1849, built the legal structure of Minnesota Territory upon the foundation laid by the territory of Wisconsin. ¹

On September 27 Alexis Bailly introduced a bill in the House to provide for "laying out Territorial roads, in the Territory of Minnesota." It became a law on November 1, when Governor Ramsey affixed his signature to it. It was repealed in 1851 when the Revised Statutes were drawn up, but it provided a working basis for Minnesota road legislation until a satisfactory code was devised. It simplified the problem of road building for a territory hard pressed for money; and it obviated for the lawmakers a lengthy, detailed list of specifications for the laying out of roads. ²

1. Ante, p. 35-37; Folwell, Minnesota, 1: 246, 248, 252.

2. House Journal, 1849, p. 61; Laws, 1849, p. 83. This bill is House File number 18, and may be found in the Bailly Papers, which are in the possession of the Minnesota Historical Society.

The act provided:

The commissioners appointed to locate and establish any Territorial road, shall cause the same to be correctly surveyed and marked from beginning throughout the whole distance, by blazing trees in the timber, by setting stakes in the prairies, eighty rods apart, and properly marked. They shall establish mile posts, which shall be marked with a marking iron in regular progression of numbers of miles from the beginning to the termination of said roads, and shall also establish posts at every angle in said roads, marking as aforesaid upon the same and upon a tree in its vicinity, if any there be, the bearing from the true meridian of the course, beginning at said angle post, set as herein directed, and note the bearing and distance of two trees in opposite direction, if there be any in the vicinity, or any other landmark from each angle and mile post. 3

Certified plats and maps were to be made for each road laid out, on which should appear the width, depth, and course of all streams crossed, the position of all swamps and marshes, the character of the country over which the road passed, and the distance traversed in each county along its route. A master copy of these plats was to be filed in the office of the secretary of the territory, and copies of the portions lying within the different counties, in the office of the clerk of the commissioners of the respective counties through which the road passed. The act stated that territorial roads should be sixty-six feet wide, and that they should be

3. The original bill stipulated that the commissioners "may cause" a road to be correctly surveyed. The intention perhaps was compulsion, but the language implied discretionary power on the part of the commissioners. The original bill provided that markers be placed at "reasonable distances apart." This was changed in the final form to read "eighty rods apart."

permanent public highways, to be worked on by the counties through which they passed. Roads were to be laid out within one year of the passage of the act authorizing their construction, and the measure further specified that no part of the cost of laying out a road, nor of damages to property, was to be borne by the counties; such expenses were to be paid from the territorial treasury. Claims for damages which had been found just by a jury of three disinterested persons summoned to hear the case by any judge or justice of the peace in Minnesota were to be certified by the commissioners for payment by the territorial treasury. However, all such claims had to be made within six months of the laying out of the road. ⁴ The compensation for road commissioners was set at two dollars per day, and for surveyors, the compensation allowed by law to the county surveyors -- all of which were to be paid from the territorial treasury. All laws, or parts of laws, already in force that contravened this new general law were repealed. This repealed the general Wisconsin law of 1838, which had been operative in accordance with the organization act.

The legislature in 1849 passed one other measure

4. The original bill provided the same method of hearing claims for damages, but the commissioners were to submit claims to the treasurer for payment if they considered them "just and equitable." In effect, this would have given the commissioners a veto power over the board of appeals, and would have constituted them a superior court for determining damages.

affecting the construction of roads. The law that provided for the organization of a board of county commissioners for each county stated that one of the duties of such commissioners was to lay out, discontinue, or alter county roads within their respective counties, and to license ferries and fix toll rates.⁵ Authority for actual construction work and for levying taxes to pay for it, could be found in the law of the territory of Wisconsin enacted in 1839. The law provided for the division of the county into road districts and the selection of road supervisors by the county commissioners, who were required to oversee the repair and upkeep of roads and to see that each male citizen between the ages of 21 and 50 worked for two days each year on the roads in his vicinity. They collected the road tax, assessed by the county commissioners, which, according to the Wisconsin law, was not to exceed one-half of one per cent of the value of the real estate. This tax might also be paid in labor on the roads at the rate of two dollars per day. The road supervisors were to build bridges wherever the county commissioners determined that they were necessary, and the cost was to be paid out of the general road fund of the county. Thus, by using the portions of the Wisconsin laws which were applicable to Minnesota, and by devising new laws where they were needed, the fron-

5. Laws, 1849, p. 53.

tler statesmen made provision for the road-building campaign upon which they were about to embark. ⁶

Much of the law to regulate the opening of roads -- their width and the general procedure to be followed by those laying them out -- was borrowed from the Wisconsin law, passed in January, 1838, which was repealed by the act. It departed from the Wisconsin precedent in one very important particular, however. The Wisconsin law stipulated that no portion of the cost of laying out roads was to be borne by the territorial treasury, but that the entire cost was to be assumed by the counties. The Minnesota law made mandatory the assumption by the territory of the expense of laying out roads. The adoption of the county form of government followed the Wisconsin plan. The conditions of settlement were very similar, and the county commissioner form of government was an efficient and economical plan for sparsely settled regions. ⁷

Regular sessions of the legislature were scheduled to begin on the first Wednesday in January of each year, but, since the session of 1849 came at the end of that year, there was no reason for convening another session

6. Ante, p. 35.

7. In Iowa, although conditions were very similar, the township plan of government was adopted in 1840 -- two years after it was organized as a territory. John E. Brindley, History of Road Legislation in Iowa, 32 (Iowa City, 1912). A good, short account of road legislation in Michigan and Wisconsin territories to 1838 may be found in chapter 1 of Brindley's work.

in 1850. The legislature which assembled in January, 1851, therefore, took up the work begun in 1849, and one of its accomplishments was that of codifying the body of laws that governed the territory. On September 1, 1851, the Revised Statutes, with the exception of certain laws for which other dates were given, became effective, and automatically all laws, whether enacted by the legislature of the territory of Wisconsin or by that of Minnesota, were repealed unless they were specifically mentioned in the text of the revised laws. Thus, the first road law, outlining the procedure by which roads might be laid out, was annulled, not by a specific act, but by its omission from the list of laws exempted from repeal. ⁸

The Revised Statutes did not define the term "territorial road," but its legality was implied in the definition of a highway, which, according to the statutes, was "any road laid out by the authority of the United States, or of this territory, or of any town or county, and all bridges upon the same." It is apparent that the lawmakers of 1851 believed that the legislature

8. Chapter 137 of the Revised Statutes specifically exempted from repeal the laws enacted by the first session for laying out roads from St. Paul to Point Douglas, from St. Paul to Little Canada, from Stillwater to the mouth of the Rum River, and from the Rum River to Crow Wing. The laws providing for specific roads were not repealed, but the general law was, apparently under the assumption that its principles were embodied in other laws. Revised Statutes, 1851, p. 578.

had the power to order roads laid out at its own expense or at the expense of smaller units of government. Under this assumption all regulations for making and maintaining territorial roads were covered by the rules governing roads constructed in the smaller units, and a territorial road was a series of contiguous county roads. Since the legal basis for county roads was worked out in the Revised Statutes, it was unnecessary to include a general road law. ⁹

In a general way the county commissioners were given authority to "lay out, discontinue, or alter county roads and highways within their respective counties, and to do all other necessary acts relating thereto." ¹⁰ Chapter 13 of the Revised Statutes, entitled "Of County Roads," laid down rules governing the application of these powers. The law specified that all county roads should be under the supervision of the commissioners of the county, and that no such road or cartway should there-

9. Revised Statutes, 1851, p. 33. A number of state supreme court decisions have amply proved the inherent right of the legislature to control roads. Among them may be cited the decision in the case of Swan E. Sanborn vs. the city of Minneapolis and others in June, 1886, in which the following statement is made: "At common-law the title to all public highways was in the king, for the benefit of all his subjects. In this country such title is in the state, either directly or through municipalities, or such agencies as it may create for that purpose, for the use and benefit of all its citizens." 35 Minnesota Reports, 318. See also W.H. Williams, comp. and ed., The Minnesota Township Code, 139 (Minneapolis, 1925).

10. Revised Statutes, 1851, p. 59.

after be established, altered, or vacated except by their authority. Roads could be established, altered, or vacated by the commissioners when at least twelve householders residing in the vicinity of the road applied for such action by petition. Notice of the application for a road had to be posted in three public places or published in three successive issues of a county newspaper at least thirty days before the petition was presented. Upon receipt of the petition, the commissioners were required to appoint two disinterested householders to act with the county surveyor as a board of examiners to inspect and mark the proposed road as nearly as possible along the lines suggested in the petition, following township, section, or quarter section lines wherever practicable. If the report submitted by the examiners recommended that the road be not opened, or if a remonstrance signed by twelve householders in the vicinity of the road had been presented to the commissioners prior to the date of the report, the road would not be constructed unless a majority of the householders along its route petitioned for it.

When the county commissioners authorized the construction of a road, the register of deeds was required to issue an order to the county surveyor to hire two chainmen and one marker to survey and mark the route indicated. The surveyor was to deliver a certified return of the survey, together with a plat of the road, to the register

of deeds before the next regular meeting of the commissioners. He was allowed two dollars and fifty cents a day for making the survey, and two dollars for the return and plat; the chainmen and the marker each received a dollar and fifty cents per day. When the plat was properly registered, the register of deeds was to notify the supervisors of the districts through which the road passed that it had been legally established as a public highway, and they then were required to open it for public use.

The county commissioners were given complete authority to vacate any road within the county, and the title to the land in the abandoned road was to revert to the owners of the land from which the road originally was taken. A road along a county line could be opened by either of the adjacent counties, but no territorial road running on a county line could be altered or vacated without the consent of both counties. The width of county roads was fixed by this law at sixty-six feet, and the legislature was forbidden to authorize the construction of any territorial road unless it passed the line of a county and was petitioned for by at least twelve householders in each county residing in the vicinity of the road. A householder who had no access to public roads could have a cartway, thirty-three feet wide, opened through intervening lands to a road by presenting a written request for such an outlet to the county com-

missioners. If any landowner along the line of the proposed cartway objected to its passage through his land, the surveyor was required to lay out an alternate cartway. If that route also was objected to, the county commissioners were to decide which of the two routes would be most suitable. After the cartway had been surveyed, the procedure followed was the same as that prescribed for county roads.¹¹

This was one step toward providing a workable system for laying out roads. County control was the predominating theme in it. The beginning of the principles of local control, however, appeared in the chapter that provided for the construction and maintenance of roads. Article 10 of chapter 3 of the Revised Statutes prescribed for Minnesota the labor tax as the method of financing construction and upkeep, and provided that a resident of each road district should be chosen supervisor at the annual general election. To insure the faithful performance of his duties, he was required to post a five hundred dollar bond on or before the first Monday in January following the election. If he failed to qualify, it became the duty of the county commissioners to appoint someone else, who was required to qualify

11. Revised Statutes, 1851, p. 112-114. The bill for this law, which was introduced in the Council by William H. Forbes as Council File number 2, originally provided that county roads should be fifty feet wide, and cartways, twenty-five feet. The compensation of the surveyor and his assistants was increased by fifty cents per day in the final form.

for the office in the same manner.

The road supervisor had to see that all the men in his district between the ages of twenty-one and fifty worked, or furnished someone to work, on the roads near their places of residence for three days every year. All work was to be performed between the first of April and the first of October of each year, and any person able to work who failed to appear after being notified was liable to a fine of two dollars per day. Delinquency was excusable on the grounds of illness, absence from home, or for "any other good cause," provided that the person was willing to serve at some other time or employ someone else in his stead. Workers were notified to appear with certain implements, and, if the supervisor required it, with a team of horses or oxen. For every day that a man furnished a team he was to receive credit for an extra day's work, and, if he furnished a cart, scraper, or wagon, such additional compensation as the supervisor deemed fit was allowed him. If he worked more than the three days required by law, he was to receive a certificate which would permit him to deduct the extra time from a future year's requirement or to sell it to some other resident of the district. No person, however, could be required to perform more than two days of extra labor in any one year, and not more than fifteen men were to be at work at the same time.

The road supervisor was required to open all public roads and highways which had been laid out as the law prescribed, but on no account was he to work on roads not legally laid out. Roads that were most traveled were to be worked first. He was authorized to contract for the building of bridges not built by poll tax labor, and to employ persons to work on roads, paying them not more than a dollar a day out of funds accumulated from a road tax assessed in his district. He was enjoined to inflict as little damage as possible on property adjacent to the road, and owners of property were allowed a reasonable compensation for damages. He was also required to erect at all crossroads legible signs indicating the distance to the next town or towns, and to keep roads free from obstructions. Anyone who defaced signs or wilfully damaged roads was liable to a fine of not less than ten, nor more than fifty, dollars.

On or before the first Monday in July of each year, the supervisor of roads was required to submit to the commissioners a statement of the length and number of public roads in his district, the repairs necessary for their maintenance, the number of persons subject to work on the roads, and an estimate of the sum required to put the roads in thorough repair. The commissioners were required to levy a road tax not exceeding one-third of one per cent of the value of real estate in the district, which was to be collected by the supervisor.

The persons against whom the tax was levied, however, could pay it in labor at the rate of a dollar per day. If the tax was not paid, ten per cent would be added to the amount, and it would be collected by the sheriff in the same way that he collected taxes for the general county revenue. In return for his labor the road supervisor was to receive two dollars per day. If he failed to perform his full duty, however, he was liable to a fine of not less than five, nor more than fifty, dollars for every offense. 12

The article which prescribed the duties of road supervisors was very vague in its definition of the road districts. It provided that "there shall be elected at the general election in each and every year, one supervisor of roads in each road district in this territory, who shall be a resident of the road district for which he is elected, and who shall hold office for one year, and until his successor is elected and qualified." 13 Nowhere in the entire section was there any statement indicating the size of the road districts. The original bill -- Council File number 3 of the legislature of 1851 --

12. Revised Statutes, 1851, p. 78-82. The legislature of 1854 amended the labor tax clause by restricting the amount of work required in payment of the tax to a single day's labor. In the matter of crediting workers for additional time, the law remained the same, but no person could be required to work more than one day extra in any one year. Laws, 1854, p. 57.

13. Revised Statutes, 1851, p. 78.

provided for the election of a road supervisor for each election precinct in the territory. The words "election precinct" were scratched out, however, and the words "road district" were substituted in the final form. Chapter 32 of the laws of 1855 clarified the definition by requiring the county commissioners to establish as many road districts as their respective counties needed, but in all cases a road district had to lie entirely in one election precinct. The election of the supervisors remained on the same basis as that provided by the original act, but the task of certifying their election was rendered simpler by delegating to the judges of election of the precincts, instead of to the clerk of the county commissioners, the power to issue the certificate of election.

The pioneer lawmakers were progressing cautiously in the direction of local control of roads. In some respects the law of 1855 placed the territory in a position resembling the township system. The restriction of the size of the road district to a single election precinct created a local unit, smaller than the township, which was practically independent in the matter of maintaining roads within its limits. The delegation of the power to certify the election of road supervisors to the judges of election was a step toward removing from the county commissioners their control of the enforcement of the poll tax law and the maintenance of the road

system. At the same time, the restraining hand of the county commissioners remained in control of the location of new roads and the alteration or vacating of old routes. The local unit had complete control of the maintenance and construction function, but the county still retained the power to state what roads should be built and when they should be built. ¹⁴

This step toward local control of the road-building and road-maintaining function was partially offset two years later when the special session of the legislature in 1857 created two new officers in the hierarchy of county government. These officers, serving two-year terms, one of whom was to be elected annually, were called road commissioners, and, acting with the county surveyor, constituted a board of road commissioners, with the power, upon actual survey, to lay out, alter, or discontinue roads in their respective counties. Roads might be laid out, altered, or discontinued upon petition of "twelve or more freeholders" residing in the county, if the public good would "thereby be promoted." Public hearings were prescribed for property holders along the road affected by the proposed change upon twenty days' notice, at the end of which time they could adjust their damages with the commissioners, or, if they were willing to post a bond to pay all costs in the event

14. Laws, 1855, p. 97.

their cases were adjudged against them or for an amount no larger than the commissioners' offer, they might have a trial by a jury of twelve. Jurors were to be allowed six cents per mile traveled to and from the place of meeting and fifty cents for their services, while the presiding justice was entitled to a one-dollar fee. For their work, the commissioners were to receive three dollars per day. If the road was laid out, this was to be paid by the county; if not, the petitioners were required to pay the cost. The commissioners were allowed to alter any United States or territorial road within the county, provided that doing so did not increase its length -- except to pass around unsurmountable obstructions -- or break its continuity at the county lines. They had the power to order owners of property which was to be taken for road purposes to remove fences within a specified time, not less than thirty days, at any time of the year except between April 1 and November 1. The law further provided that territorial roads that were not surveyed within a year of their authorization no longer were to be considered public roads. The right of landowners to plant trees along the right of way was recognized, provided that they were placed not closer than ten feet from the edge. This was the last general road law passed by the territory, and with its passage, the frontier lawmakers were, perforce, content. 15

15. Laws, 1857, extra session, 244-249. At the regular session the legislators voted to increase the pay

It is difficult to understand why these two offices of government were created. The act was a step away from the development of a local system of road maintenance and construction, and the adoption of a township plan of government the following year seems to indicate that such a system was desirable. Indeed, it concentrated in the hands of three individuals the function which formerly had been performed by the county commissioners as a whole, or by persons delegated to perform it by the commissioners. In a way, this act created a system similar to that which prevailed in Iowa during the brief period from 1851 to 1853. In that state, the powers of determining the location of new roads, of altering or vacating old ones, and the assessment of the road tax had been taken completely away from the county commissioners and vested in the hands of the county judge. In Minnesota the function of establishing, altering, and vacating roads was performed by the two especially elected road commissioners and the county surveyor, but the county commissioners retained the power to assess taxes for road and bridge purposes. Under the Iowa law a county road supervisor saw to it that the locally elected district supervisors performed the work assigned to them. In Minnesota this general power of supervision

of county surveyors, "while engaged in the surveying, laying out, altering or examining County or Territorial Roads," from two and a half to three dollars per day. Laws, 1857, regular session, 30.

remained in the hands of the county commissioners, and the performance of the work, in the hands of locally elected district supervisors. The system remained in operation for only a short time, and there is so little contemporary comment about it that it is difficult to determine what ultimate object the sponsors of the bill sought to attain. Presumably it was designed to relieve the commissioners of the often tedious task of laying out roads. 16

Prior to 1856, no attempt was made to provide for the maintenance by the territory of the roads which the federal government was building. The legislature that year, however, passed a law which classified as territorial roads all the military roads which had been built, and also all roads for which the federal government might appropriate funds in the future. In addition to making provision for the maintenance of these roads after they were completed, this law made it possible to acquire a right of way through privately owned lands, for under existing federal laws a right of way could not be forcibly seized if the owner objected to having the road pass through his property. The law was modelled after a similar law passed by the territory of Michigan in 1830 to insure the maintenance of government constructed roads. 17

16. Brindley, Road Legislation in Iowa, 95.

17. Ante, p. 71n; Laws, 1856, p. 152; Brindley, Road Legislation in Iowa, 5.

All these measures stabilized the procedure for laying out roads and provided for their construction. There was one more requirement in the legal structure providing good transportation facilities in the frontier territory. That was the machinery for regulating the granting of ferry licenses. It was feasible, both from the physical and the financial point of view, to construct bridges over small streams. When larger rivers were encountered, however, the counties of Minnesota had at their command neither the technical skill nor the financial backing requisite for the construction of substantial bridges. It was far easier and much less expensive to ferry goods, stock, and persons across such streams. The equipment needed for a ferry was not elaborate. Sometimes it consisted of a raftlike structure which was propelled across the stream by poles or ropes. More often, it was a slightly more complicated mechanism, consisting of a bargelike boat hitched by a pulley at each end to a heavy cable spanning the river. The motive power was furnished by the current hitting against a keelboard. The boat was slanted upstream by lengthening or shortening the lines of the pulleys, so that the current, hitting it at an angle, drove it across the stream. Where much wider rivers were encountered -- such as the Mississippi at Winona -- cable ferries could not be operated, because a cable would have constituted a barrier to steamboat navigation. It therefore became necessary to devise some

other form of ferry, and so horse ferries -- propelled by one or more horses walking in a treadmill -- or steam ferries were used.

In a country which was so dependent upon ferry transportation for crossing the numerous streams, it became imperative that some legal provisions be made for their regulation. The first legislature received several applications for ferry licenses but granted only one -- a five-year charter to Franklin Steele, who "at a great expense in the construction of roads and other improvements established a temporary ferry at the Falls of St. Anthony." No attempt was made to pass a general law to regulate ferries, as had been done in the case of roads, although the right of the legislature to regulate them was equally clear. The general law defining the duties of county commissioners passed at the first session relegated to those officials the duty of controlling ferries within the counties, in the same manner as it placed on them the duty of regulating roads. ¹⁸

18. Laws, 1849, p. 53, 98. Steele's petition was presented to the Council on September 11, 1849. Council Journal, 1849, p. 30. The petition is in the archives of the secretary of state. The minutes of the meeting of the commissioners of Ramsey County, published in the Minnesota Chronicle and Register for January 26, 1850, stated that licenses for two ferries had been granted. James M. and Isaac N. Goodhue were licensed to operate a ferry at the Lower Landing in St. Paul, and at the Upper Landing a license was granted to John R. Irvine, D. F. Brawley, and Justus C. Ramsey. How many other counties followed a similar course is not known, but at least the opportunity to do so was open to all organized counties.

The legislature in 1851 considered the problem in earnest, and as a result a bill specifying the method by which commissioners of the various counties should regulate ferries was adopted. It provided that the commissioners of any county could grant a license to establish a ferry wherever it was necessary, and could levy an annual tax for the privilege of not less than five, nor more than fifty, dollars. Licenses, properly signed and attested, might be granted for terms of not more than two years, provided that the applicant for the license had satisfied the requirement of posting a notice of his intention, twenty days before a regular meeting of the commissioners, in three public places in the vicinity of the spot where he intended to establish the ferry. Ferry operators were required to keep on hand a sufficient supply of good boats and enough employees to satisfy the needs of the public "from daylight in the morning until dark in the evening," and, at any time of the day or night, to transport mail or other public express across the ferry. They were protected by the law from suits for damages resulting from the elements -- ice or floods. The rate of ferriage was to be regulated by the county commissioners, and a copy of the rates allowed had to be posted at the door of a ferry house or at some conspicuous place near the landing. For charging more than the scheduled prices, an operator was liable to a fine of not more than twenty dollars. If anyone estab-

lished a ferry without authority to do so, he was subject to a fine of not less than one, nor more than twenty-five, dollars. 19

The bill to regulate ferries was introduced as Council File number 4 under the title, "A Bill to authorize the establishment and regulation of Ferries and Bridges in this Territory." Section 1 of the bill provided that a ferry could not be established within one mile of an already existent ferry except by "act of the Legislative Assembly." When the measure became law, this qualification was removed, and the restriction which was allowed was innocuous, for it provided that "no ferry shall be established within one-half mile of any ferry already established, unless when the county commissioners think it necessary." There was another weakness in the law, for, when the license was granted for a ferry across a stream which formed the line of a county, there was nothing to prevent the commissioners of the county on the other side of the river from licensing a competitor. The only alternative that the operator of such a ferry had was to secure licenses from both counties, and that meant a double tax. 20

19. Laws, 1851, p. 25; Revised Statutes, 1851, p. 606.

20. Revised Statutes, 1851, p. 606. Section 7 of the original bill provided that, if a man owned land on both sides of a stream, he did not need to obtain a license for operating a ferry, provided that he did not place it within one-third of a mile of an established, licensed ferry. It also provided that no ferry could be established except where a road was laid out to the banks of a stream, and all landings were required to be on public roads.

A most interesting feature of Council File number 4 were the provisions for the construction of bridges by private corporations. County commissioners, according to the bill, might grant permission to build toll bridges under the same rules that governed the granting of ferry licenses. Such licenses could be granted for periods of not more than nine years, and at the expiration of that time the bridges were to become public property. They were to be built in such a way that they did not impede navigation, and the builders were to be required to keep them in good repair. For any damages arising from their neglect to do this, the bridge owners were to be liable to a penalty equal to twice the amount of actual damages, which might be collected by the injured person in any court having jurisdiction. Council File number 4 ran into opposition in the House, and, as a result, on February 5, 1851, House File number 9 was introduced as a substitute measure. It omitted all that portion relating to toll bridge corporations, and in this form the bill became a law.

The law regulating the granting of ferry licenses was, in general, workable. The clause allowing county commissioners to license a ferry near one already licensed by another county was partially adjusted by a law passed in 1852, which provided that all ferries would be deemed "to be situated in the county in which the keeper thereof resides, on that side of a river on which the ferry

house is situated; and no ferry shall be liable to pay tax to but one county." In addition to this change, the act provided that ferry licenses might be granted for a period of six years, instead of two years, as defined in the original law.²¹ In 1854 the ferry law was further amended by a provision that a license for a ferry across a stream which was in two counties had to be obtained in the county in which the applicant resided. Within ten days of the granting of the license by this county, a certified copy of it was required to be filed in the office of the clerk of the commissioners in the adjoining county, and, in addition to the tax provided for in the laws of 1851 and 1852, the licensee was required to pay a fee of five dollars annually to the treasurer of that county. If these conditions were lived up to, the commissioners of the adjoining county were forbidden to license a ferry within a half mile of the point designated in the license; if not, they could, after thirty days, license another ferry in its place. This removed the evil resulting from the existence of two ferries, licensed by neighboring counties, at the same landing or road ending.²²

Minnesota passed through the territorial period during the closing years of a great era in transportation history. It was at the dawning of the modern rail-

21. Laws, 1852, p. 36.

22. Laws, 1854, p. 11.

road age, but to frontier settlers of that day, the railroad was a distant possibility. The stagecoach and covered wagon, however, were commonplace realities to them. Therefore, while they dreamed of railroads to come in the future, they also planned improvements for the time in which they lived, and they thought in terms of stagecoaches and covered wagons, and of familiar, homely wagon roads. In the background of their experience lay the turnpike and plank-paved roads of their own age -- roads made and maintained usually by private capital, for traveling over which a charge was made. The plank road was a remnant of the toll road epoch in the history of transportation. Its popularity was based on the supposition that it could be built more cheaply than a turnpike road, and would give a maximum of efficiency. Experts believed that three-inch hardwood planks would stand up for a period of from seven to ten years before extensive replacements would be necessary, and such replacements would be cheaper than the repairs required on a turnpike. In the eastern states the plank roads came into existence as supplements to the canals and railroads, and as little feeder lines to the turnpikes. They were rarely of great length, and little effort was made to make a connected system of them. Their popularity in the East lasted for only slightly more than a decade -- 1845 to 1857 -- and they waned in popular favor as rapidly as they developed. Their western development is less well

known, but they were in favor in Minnesota from the dawning of the territorial era. 23

Soon after James M. Goodhue came to Minnesota to establish the first newspaper printed in the territory, he began to discuss the possibilities for improving the means for land travel between St. Paul and its sister village, St. Anthony. He ardently wished for a railroad, but, recognizing the difficulty of raising sufficient capital for such an enterprise in the new country, he pleaded for a plank road to connect the two places. About the same time, Henry M. Rice, soon to become territorial delegate to Congress, wrote to a friend asking for his help in obtaining a legislative charter for a plank road company which he hoped would be organized during the coming session of the legislature. 24

As a consequence of this planning, the legislature which met that fall chartered the St. Paul and St. An-

23. Joseph A. Durrenberger, Turnpikes; A Study of the Toll Road Movement in the Middle Atlantic States and Maryland, 144-152 (Valdosta, Georgia, 1931). Brindley, in his Road Legislation in Iowa, failed to trace the activity of plank road companies. He found evidence which led him to believe that at least two plank roads were built in Iowa, and that several graded toll roads were built. The law passed by the Minnesota legislature in 1851 for the regulation of plank road companies did not vary greatly from the Iowa law either in its legal requirements or the procedure required to be followed. See Brindley, p. 57-76; post, p. 246-248.

24. Goodhue's attitude toward the transportation problem is summed up in an editorial in the Minnesota Pioneer for December 12, 1849. See also Minnesota Pioneer, March 27, December 26, 1850. Rice to J. H. McKenny, July 13, 1849, in Sibley Papers. Rice wrote: "We want a charter for a plank road from the falls to this point [St. Paul], and must have the votes."

thony Plank Road Company. The bill is interesting not only because it was the first fruit of this desire for improved transportation facilities in the Minnesota country, but also because it embodied many of the principles which appeared in a general act, passed in 1851, to regulate the incorporation of such companies. The law gave the incorporators permission to receive subscriptions to the capital stock of twenty-five thousand dollars -- which was divided into one thousand negotiable shares of twenty-five dollars each -- thirty days after publishing notice of their intention to do so in "all the newspapers printed in this Territory." As soon as the capital stock had been subscribed for and five dollars had been paid in on each share, the stockholders might organize the company. Thirteen stockholders were to be elected directors of the corporation, and one of them was to be selected as president. After this first meeting, annual elections of officers were to be held on the first Monday in May. The presence of nine directors at a meeting was considered a quorum. The corporation was declared to be a legal entity, subject to all the privileges and responsibilities of individuals. All lands needed for the construction of the road might be taken, provided that the right of way was not more than four rods in width and that the owners were paid a satisfactory sum for them. In cases of dispute over the compensation for lands taken for the road, a hearing before a jury of

five impartial citizens of the vicinity was to be held. As soon as five consecutive miles of road had been completed, the company might erect toll gates. A schedule of maximum rates chargeable was outlined, and provision was made for the exemption from toll charges of persons going to or from "military parade at which they are required by law to attend, and persons going to and from public worship." Other clauses provided for increasing the amount of capital stock to complete any unfinished portions of the road, and for the punishment of persons guilty of wilful destruction of company property. One-third of the road had to be completed by January 1, 1851, and the remainder by January 1, 1852. The legislature reserved the right to grant charters for other roads which might intersect this road and to repeal or amend the charter of the corporation at any time. ²⁵

In 1851 the legislature enacted a general law to regulate the incorporation of plank and turnpike road companies, which became chapter 39 of the Revised Statutes. In general, the law followed the regulations laid down in the charter incorporating the St. Paul and St. Anthony Plank Road Company. It provided penalties for failure to keep the roads in good repair, naming as inspectors the justices of the peace in the precincts through which the road passed. The right of way for

25. Laws, 1849, p. 91-95.

plank roads was required to be four rods wide, with a track of "timber, plank, or other hard material" wide enough to permit vehicles to pass one another. The same general regulation applied to turnpike roads. They were to be bedded with stone, gravel, or such other material as might be found along the right of way, and faced with broken stone or gravel. The road bed was required to be at least eighteen feet wide, and both plank and turnpike roads were to be so constructed as not to interfere with intersecting roads. Charters for plank or turnpike roads were rendered void if, within two years, construction work had not been begun and if at least ten per cent of the capital stock had not been expended upon the work. Moreover, the road had to be completed within five years from the organization of the corporation. The law was even more specific than the special act incorporating the St. Paul and St. Anthony company in the matters of regulating the affairs of the company, and of altering, amending, or repealing its charter. If all provisions of the law were adhered to, the charter of such a company was perpetual, although the legislature was free to cancel it at will. In 1866, however, the law regulating plank roads was incorporated into the chapter of laws dealing with corporations, and the general rule applying to corporations organized for public benefit was extended to them. This rule stipulated that no charter could be granted for periods of more than fifty

years, but that upon expiration of this term the charter might be renewed for a like period. In this form the law remained in force until the good roads movement of the twentieth century completely outmoded the old-style toll road. ²⁶

The experience of Minnesota with plank and turnpike roads was disappointing. The charter granted to the St. Paul and St. Anthony Plank Road Company was revoked when the incorporators failed to comply with its terms, and no company was chartered in its place. Perhaps one of the main reasons for the failure of this company to build its road -- aside from the factor of funds -- was the clause which allowed the legislature to revoke, amend, or alter its charter at any time. Responsible citizens could not be induced to invest capital in so uncertain a venture. So, while it was generally a matter of regret that no plank road was constructed, it also was generally accepted that, until the legislature gave some promise of freedom from official interference, no road could be built. ²⁷ No charters for plank or turnpike road companies were granted during the legislative sessions of 1851, 1852, and 1853, but the territorial legislature of 1854 chartered six such companies. Under

²⁶. Revised Statutes, 1851, p. 163-175; General Statutes, 1866, p. 263-268, 286-291, 1894, p. 917-922.

²⁷. Minnesota Democrat, July 29, September 21, 1851; Minnesota Pioneer, January 22, March 18, 1852; S. B. Elliott to William P. Murray, November 15, 1852, in Minnesota History Bulletin, 1: 117 (August, 1915).

these chartered roads were to be built from Minneapolis to Little Falls, from Red Wing to Henderson, from Henderson to Fort Ridgely, from Minneapolis to Lake Minnetonka, from St. Paul to Point Douglas, and from St. Paul to Little Canada. They failed utterly to materialize -- only the company chartered to build a road from Red Wing to Henderson showed any signs of activity. Late in April, 1854, the Minnesota Pioneer announced that shares of the company's stock could be purchased on June 1. No evidence has been found to show that any stock was sold; certainly, the road was never built. 28

No companies were chartered during 1855, although a bill for a plank road from St. Paul to Sauk Rapids was introduced. Two companies -- the Target Lake Plank Road and Ferry Company, designed to operate a ferry over the Mississippi River opposite La Crosse for which it was necessary to build an expensive causeway over marshy ground, and one for a plank road from Shakopee to Chaska -- were chartered in 1856, and bills for at least two more were introduced -- one for a plank road from Lake Superior to Mille Lacs, and another for one from Shakopee to Le Sueur. In the regular session of 1857, six such bills were introduced, only one of which became a law. The La Crescent Gravel and Plank Road Company was formed to improve a street in the village of La Crescent, and

28. Laws, 1854, p. 108-117, 129-149; Minnesota Pioneer, April 20, 1854.

provision was made for the purchase of the road by the village. The extra session of 1857 produced two such companies: one to build a plank and gravel road between Faribault and Cannon City in Rice County; the other, a plank road from Minnesota Point on Lake Superior to Knife River, about twenty miles up the north shore of Lake Superior. 29

Why were so many plank roads authorized but never built? Joseph R. Brown, who was the moving spirit in the enactment of the plank road legislation, was a territorial leader, secretary of the Council from 1849 to 1851, member of the Council in 1854 and 1855 and of the House in 1857. In 1854, when the great splurge in forming plank road corporations took place, he and David Olmsted had the contract for the territorial printing, and the thesis has been advanced that the motive for Brown's interest in plank road legislation was based on the financial benefit that he derived from the printing of bills -- whether or not they were intended to be enacted into law. It is true that Brown supported most of the bills chartering such companies, but it also should be pointed out that he showed a far greater interest in the development of transportation in Minnesota than most of his contemporaries. 30

29. Laws, 1856, p. 178-183, 315-317, 1857, regular session, 27-29, extra session, 148-153, 195-197.

30. Folwell, Minnesota, 1: 263.

It is difficult to determine whether or not the bills for chartering plank road companies were introduced in good faith. Certainly, some of them were, for Minnesota was growing up during a period when toll roads were a prominent part of the road system of the eastern states. It is obvious that some of the bills were not too seriously considered. Even the most zealous of plank road enthusiasts must have realized that it would be several years before they could interest sufficient capital to build a plank road from St. Paul to Lake Superior. The country between the two places was but sparsely settled in 1854, and it was well known what tremendous engineering tasks confronted the builders of the military road to Lake Superior, which was still far from complete. Similarly, it must have appeared foolhardy to contemplate the construction of a plank road from St. Paul to Sauk Rapids in 1855, or for a good many years thereafter. In 1856 there was a demand for a military road from Lake Superior to Crow Wing, but obviously no serious-minded person would have considered building a plank road across the wilderness that separated Lake Superior and Mille Lacs. The same may be said of the road chartered to be built between Minnesota Point and Knife River. On the other hand, certain of the roads were distinctly feasible. Plank roads from St. Paul to St. Anthony, from Minneapolis to Lake Minnetonka, or from St. Paul to Point Douglas or Little Canada probably would have been profitable investments.

The great number of bills chartering plank roads through areas which could not support them lends credence to the charge that Brown was out for the money he could obtain for printing them. There is evidence, however, which points to a genuine interest in transportation on Brown's part. He was the principal owner of the town-site of Henderson, and he was vitally interested in making it a successful venture. Consequently, he worked for the improvement of means of communication between his town and other centers of Minnesota, and it is not inconceivable that he sincerely hoped that a successful plank road might be built between Red Wing and Henderson and between Henderson and Fort Ridgely.³¹ In the late fifties, Brown had a sizeable stake in the development of transportation facilities in Minnesota and the Northwest. He was one of the incorporators of the Minnesota, Nebraska and Pacific Mail Transportation Company which the legislature chartered in 1857; and he was a partner in several ferry companies which the legislature incorporated, including three along the route of the wagon road from Fort Ridgely to the South Pass of the Rocky

31. Folwell, Minnesota, 1: 379. Folwell points out that the same session of the legislature which incorporated Henderson authorized surveys for nine roads radiating from that place. Brown was also successful in obtaining the location of a military road through his town. Ante, p. 107. The Minnesota Democrat for March 29, 1854, quotes a letter charging that Brown used the plank roads to cover the meager developments at Henderson. A plank road charter, the letter stated, "will at any rate sound large abroad."

Mountains. 32

There is other evidence to indicate that Brown's interest was genuine. At some time during his career, just when is not known, he became interested in the adaptation of the steam tractor to transportation over wagon roads. From long experience he was aware of the slow and expensive methods of transportation in vogue on the frontier, and it is not improbable that he was weighing the practicability of adapting the steam engine to American frontier conditions at least as early as the middle fifties. Good roads were essential for the success of such a program, and plank roads were more desirable for it than earth roads. It was in 1857 that Ramsay Crooks, agent for the Hudson's Bay Company, made arrangements for transporting supplies for that firm to Fort Garry by way of St. Paul and the Red River Valley, instead of by the traditional route through Hudson Bay and York Factory. Brown says that he saw in this arrangement a capital opportunity for trying out his idea of using steam tractors for hauling trains of wagons on wagon roads. Therefore, we know that the idea had been thought out before this time; it may have been developed years before. Brown made the first of his experiments in 1859, and during the summer of 1860 he actually ran a steam tractor on the streets of St. Paul. ^{Red River.} That fall he

32. Laws, 1857, regular session, 223-225, extra session, 64, 297.

used it on an experimental trip from Henderson to Fort Ridgely, hauling a freight wagon. The tractor bogged down in soft ground a short distance from the fort, however, and for the time being, Brown's experiments ended. When next he tried them, it was in Nebraska, where the terrain was ^{more level} ~~leveler~~ and the natural obstacles less difficult to overcome. This experiment was cut short at a promising stage when a mechanical defect developed. Before the break could be repaired, the Sioux outbreak of 1862 occurred, and Brown dropped his hobby to hurry home to rescue his family. 33

Evidence to prove that Brown intended to develop a plank road system for Minnesota is at best circumstantial. Yet, there does appear to be ground for such a belief. The fact that he performed his experiments on ordinary roads does not necessarily detract from the plausibility of the belief. There was insufficient capital in Minnesota to develop a system of plank roads, and in their absence his experiments, perforce, had to be carried out on the roads at hand. The ultimate failure of Brown's dream of transportation by steam tractors was foreordained. The railroads determined the outcome. Yet, he had a glorious dream, and in endeavoring to bring it to fruition, he labored hard to give Minnesota a road system which should assure its success. In this light,

33. Folwell, Minnesota, 3: 347-357 (1926). Folwell made an extensive study of Brown's steam engine, and among the Folwell Papers are two folders, one labeled "J. R. Brown" and the other "Steam Engine," relating to it. The Folwell Papers are in the possession of the Minnesota Historical Society.

a fresh significance is given the tradition that Brown wanted plank road charters to enrich his printing contract. He probably did not confide his dreams to his acquaintances, and perhaps it was because of their puzzlement over the great number of plank road charters sponsored by him that they attributed his interest to avarice. The same lack of understanding may have inspired the somewhat cryptic statement which Martin McLeod made in a letter to Henry H. Sibley in 1853: "Wonder if J. R. B[rown] wants any more road charters. Oh, Lord!" 34

Brown's interest in this novel means of transportation persisted, and in 1869 and 1870 he was again occupied with plans for developing steam motor transportation between the head of the railroads in the Red River Valley and all the frontier posts. He even contemplated a line to the Pacific coast. At the time that his prospects seemed about to mature, the legislature enacted a law authorizing the construction of special roads for such motors. The law empowered the commissioners of counties to construct roads for steam traction motors if, after they had procured from the owner or operator of a fleet of such motors an agreement to transport the agricultural produce of the county at a reasonable cost, the voters of the county approved the issuance of

34. McLeod to Sibley, March 31, 1853, in Sibley Papers.

bonds in amounts not to exceed three thousand dollars per mile of road. If they failed to approve the expenditure, the road still might be built by private capital at the request of a majority of "freeholders and persons living on United States lands who have filed there [sic] declaratory statement . . . and residing at the time within one mile of the line of said road." Such roads were to be twenty feet wide, and, where a road was to be used by both steam motors and ordinary wagon traffic, one section, twenty feet wide, was to be reserved exclusively for steam tractors. 35

While there is little doubt that Brown enthusiastically backed this plan, it is equally certain that the bill must have had other supporters. One source of such support easily could have been found in the agricultural areas of the state. In the first place, the settlement of the western prairies was retarded by the failure of the frontier to obtain railroads. It was recognized that, no matter how rapidly the railroad-building program was pushed, it would be years before many of the western counties could hope for adequate railroad communication. There the steam motor would have filled a long-felt need. Furthermore, during the year or two preceding 1870, a suspicion had grown in the minds of the agricultural

35. Folwell, Minnesota, 3: 355-357; General Laws, 1870, p. 29-34; Saint Paul Daily Pioneer, November 13, 1870. The law made no provision for the maintenance of the roads.

population of Minnesota that the development of the railroad system was not an unalloyed blessing, for high freight and passenger rates and discrimination against communities already had become a major issue in the opinion of the Patrons of Husbandry. So onerous was the weight of excessive freight charges that farmers along the route of a portion of the Winona and St. Peter Railroad were hauling wheat "alongside of the road with teams," and so productive of good was the method of competition that "the railway company have reduced the freight 4 cts. a bushel on that part of the road." If horse and wagon competition brought the railroad company to its knees, the effect of competition by steam tractors, hauling trains of wagons on ordinary roads, conceivably might have been much greater. It was unfortunate that Brown died before he could put his plan into operation, for the scheme died with him. 36

36. Solon J. Buck, The Granger Movement; A Study of Agricultural Organization and Its Political, Economic and Social Manifestations, 1870-1880, 160 (Harvard Historical Studies, vol. 19 -- Cambridge, 1913); Saint Peter Tribune, March 9, 1870. For a statement of the grievances because of unfair railroad rates, see Governor Austin's message, dated January 5, 1871, in Minnesota, Executive Documents, 1870, vol. 1, p. 38-41. So far as is known, no agreements were ever made with any counties for the construction of roads for steam motor vehicles, in spite of the fact that the statute remained in force for more than thirty years.

VII. ROAD LAWS OF MINNESOTA, 1858-95

The admission of the territory into the Union gave Minnesota an opportunity to take stock of her legal machinery. During the closing years of the territorial period, there was a growing dissatisfaction with the existing scheme for local government, and some people felt that many services which they were entitled to receive from their local units of government were denied them. Many of the benefits, they thought, could be obtained only if the plan of county organization were abandoned and a substitute machine set up. So strong was the sentiment for change that, when the constitutional conventions met in the summer of 1857, there was a movement in both the Republican and Democratic wings to write a modification of the county plan of organization into the constitution. Soberer counsel ruled, however, and the revision of the form of local government was left to the legislature. ¹

The first legislature that met after the new con-

1. William Anderson and Bryce E. Lehman, An Outline of County Government in Minnesota, 23 (University of Minnesota, Bureau for Research in Government, Publications, no. 7 -- Minneapolis, 1927); William Anderson and Albert J. Lobb, A History of the Constitution of Minnesota with the First Verified Text, 127 (University of Minnesota, Studies in the Social Sciences, no. 15 -- Minneapolis, 1921).

stitution had been approved by the people -- although it had not yet been approved by the federal government -- took up the task bequeathed to it by the constitutional convention. With but little difficulty, the proponents of change brought about the abolition of the county commissioner form of government which had prevailed during territorial days, and the adoption of a plan of organization on a township basis, with a representative from each of the townships in the county meeting in annual session as a county board of township supervisors to transact such business of the county as could not be delegated to the townships. A similar plan of government had gained favor in the neighboring states of Iowa and Wisconsin, and it represented a decentralization of power in local government based upon the plan in force in Illinois. ²

2. Anderson and Lehman, County Government in Minnesota, 24; Brindley, Road Legislation in Iowa, 111; General Laws, 1858, p. 190-227; House Journal, 1857-58, p. 862. The legislature which met in the fall of 1857 passed a township law on March 20, 1858. Chiefly because the measure was carelessly phrased, the legislature, in the summer of 1858, repealed it and substituted a new township organization act in its place. The language of the later bill, which became effective on August 13, 1858, differed considerably from the act of March 20, but its general purpose was the same. Many of the townships were organized under the first law, and the legality of their organization was expressly recognized by the act of August 13. The legislative committee which drew up the latter act reported that one of the chief defects of the first act was its indiscriminate use of the word "supervisor" to designate practically every officer in the town organization. The committee recommended that, in the new bill, the

In this new scheme of government the regulation of affairs pertaining to roads was brought closer to the people than it had been under the county commissioner form of government. It retained most of the features of the territorial law, but, whereas the county commissioners under the territorial form of government had supervised the performance of the road supervisors, the scrutiny of the official performance of the duties of the office was now to be made by the board of supervisors which regulated the affairs of the townships.

The Supervisors in the several towns in this State, shall have the care and superintendence of roads and bridges therein; and it shall be their duty to give directions for the repairing of the roads and bridges in their respective towns; to regulate the roads already laid out, and alter each of them as they, or a majority of them, shall deem proper, as hereinafter provided, to cause the roads and the bridges which are or may be erected over streams intersecting roads, to be kept in repair; to divide their respective towns into so many road districts as they shall deem convenient, by writing under their hands, to be lodged with the Town Clerk, and by him entered in the town records, such division to be made annually if they shall deem it necessary, and in all cases, to be made at least ten days before the annual town meeting; to assign to each of the said road districts, such of the inhabitants liable to work on highways as they shall think proper, having such regard to proximity of residence as may be, and to require the Overseers of Highways, from time to time, as often as they shall deem necessary, to warn all persons liable to work on roads, to come and work thereon, with such tools, carriages, cattle or teams, as the said Overseers, or either of them shall direct. ³

officials in charge of roads and the poor be designated as "overseers." House Journal, 1857-58, p. 862. The act of March 20 is printed on pages 311-334 of the General Laws for 1858.

3. General Laws, 1858, p. 216.

This general supervisory power was further expanded by the provision that the township clerk and the justices of peace of the township, meeting as a board of town auditors, should examine the records of the road overseers and report estimates of funds needed for road improvements in excess of what could be accomplished by poll tax labor. From these records the township supervisors were to assess the "highway labor and road tax to be performed and paid in their town the next ensuing year." Moneys remaining in the hands of the overseers, when they made their annual reports, were to be paid to the supervisors, who were to apply it on roads and bridges within the township. These were functions which the county commissioners had exercised for the counties during the territorial period. In general, if the territorial law is read with the substitution of the word "township" for "county," and "supervisors" for "commissioners," it can be applied to the township system of local government with but few exceptions. One of these was the proviso that the township supervisors were forbidden to lay out, alter, or discontinue state and county roads, although their power with regard to township roads was supreme. Another was in the method of making appeals from the damages allowed to property owners because of road changes. Such appeals were not made to the township supervisors, but to the county board of town supervisors, and three of its members, none of

whom could be resident in the township from which the appeal was made, were to act as a court to decide the case. Both parties to the appeal were bound to accept their judgment as final, but if the payment of damages assessed by such a court would, in the opinion of the board of town auditors, require the levying of an unreasonably heavy tax on the property in the township, the town supervisors could appeal to the county board of town supervisors for relief from all or a part of the damages. The award of the court then would be postponed until the money could be raised by some method other than a specific tax on the property in the township. In other words, the county could assume a part of the cost. ⁴

The labor tax system in force during the territorial period remained the law of Minnesota after statehood was achieved. It was modified in that there was no longer a set number of days during which citizens were required to work on the roads. Instead, the number of days of labor was determined by the town supervisors at their annual meetings, but it could not be less than one, nor more than four days, and seventy-five per cent of the work had to be done before August 1 of each year. Commutation of the labor tax by a cash payment was provided at the rate of one dollar and fifty cents for each day of labor assessed.

4. General Laws, 1858, p. 200, 212, 218, 220, 225.

The property tax for roads of the territorial period likewise was carried over. This tax, which could not be assessed at a rate greater than fifty cents on each one hundred dollars of valuation, could be paid in money or in labor at the rate of one dollar per day. ⁵

Under the township plan of local government, the county's functions in regard to road matters were subordinated to those of the township, and were operative only where the township did not or could not adequately perform the functions of local self-government. The county was given power to "alter, establish, or discontinue any county road or roads" within its boundaries, but no specific provision was made for it to perform the work. The exception of county and state roads from the list of those which the town supervisors might alter, lay out, or discontinue created a problem, for it was interpreted to mean that the township had no jurisdiction over them. The solution was found in the proviso that all laws in force at the time of the passage of the township act which were "applicable to the board of county commissioners, shall apply to the county supervisors' court." Chapter 13 of the Revised Statutes of 1851, which designated the manner in which county roads should be treated, and the act to create two road commissioners for each county, passed at the extra session

5. General Laws, 1850, p. 218-221.

of the legislature in 1857, provided a means by which the road overseers could take over the construction and maintenance of these county roads. ⁶

There were weaknesses in the plan of organization, however, which opened it to criticism, and eventually led to its repeal. In large counties the township board was an unwieldy body, in which the formation of factions and cliques was a natural development, and the meetings of the county boards often degenerated into partisan squabbles. In Goodhue County, for example, the factions in the county board of supervisors almost brought about a county-wide disturbance. The first board was predominantly Republican -- nineteen Republican to four Democratic members -- and in every vote taken the party lines were maintained intact. In Dakota County, where the number of members was twenty, the board of supervisors earned the name "Hastings Legislature" or "Dakota Legislature," and equally widespread divisions appeared, based solely upon the issue of partisan politics. It was a weakness which was inherent in the plan of organization under the township act. ⁷

In his farewell address to the legislature in 1859, Governor Sibley called attention to the accumulation of

6. Ante, p. 225-234; Public Statutes, 1849-1858, p. 221, 248-255.

7. Anderson and Lehman, County Government in Minnesota, 24; Red Wing Republican, June 18, July 16, 23, 30, 1858; Hastings Independent, January 27, February 10, 1859.

a huge debt on the part of the local units of government because of the bulky machinery set up for the government of the towns and counties. While this did not apply specifically to road affairs, yet they were included, for the administration of the road laws was a function of the local governments. Sibley urged that the township act be repealed and the former county commissioner form of government be restored. The township form of government might be applied satisfactorily in a well settled region, he acknowledged, but he held that its enforcement in a frontier state was not conducive to the financial solvency of the state or local units of government. The soundness of Sibley's advice was not questioned, but he was followed in the governor's chair by a man who held firmly to the tradition of town government. Governor Ramsey, addressing the legislature less than a month after Sibley had appealed to it for a renunciation of the township form of government, urged the legislature not to give it up. He admitted that the criticisms made were largely true, and that the law perhaps was not suited to a frontier state, but he pleaded that "the system of town government, now beginning to be understood and soon to become necessary need, need [sic] not be entirely abandoned." If it was found to be unworkable, he suggested that a compromise be effected, retaining the township organization, but abolishing the county board of town supervisors in favor

of a three or five man board of county commissioners. ⁸

The legislature followed the recommendation of Governor Ramsey, and the modified form, which combined the county commissioner and the township plans of government, has remained in force ever since with but few alterations. Sentiment in favor of the supervisor system was strong for several years, however, and, as late as 1870, an attempt was made to change back to that plan. One newspaper editor, commenting on the failure of the plan, exclaimed: "Good! The present system is far preferable to the one proposed." ⁹

In recasting the laws to reorganize the local government of the state, the lawmakers crowded into a single chapter of the statutes for 1860 the laws regulating roads. The new chapter of the statutes varied little from the law of 1858, except where it had to be changed to conform to the revised legal structure of township and county government. The power of the townships to regulate their roads and bridges was restated, and some of the difficulties inherent in the law of 1858 were removed.

The Supervisor[s] of the town may alter or discontinue any road, or lay out any new road when petitioned by any number of legal voters not less than six, residing within one mile of the road so to be altered, discontinued or laid out; said petition shall set forth in writing a description of the road, and what part thereof is to be altered

8. The messages of Sibley and Ramsey, dated December 8, 1859, and January 2, 1860, respectively, are in House Journal, 1859-60, p. 22, 166.

9. Saint Peter Tribune, February 16, 1870.

or discontinued, and if for a new road, the names of the owners of the land, if known, over which the road is to pass, the point at which it is to commence, its general course, and the point near which it is to terminate; Provided, That the said Supervisors shall not have power to vacate, alter or change any State road, any portion of which passes through any of the unorganized counties of the State, nor shall they vacate any portion of any mail route, or change the same in any manner so as to make the same materially longer, and when any change is made in any such route, the Supervisors shall cause the same to be immediately opened and made passable; Provided, That State roads not opened within two years from the time they are laid out may be vacated as other roads. 10

The relation of the township to existing roads was clarified by the statement that "Public roads and parts of roads, whether Territorial, State, or County, now legally existing, are declared the highways of towns in which they shall be, and may be altered, discontinued, or re-opened by their respective town authorities as other roads." These two clauses clearly established the relationship of the township to the roads within its boundaries. One other addition which this law made to the road code of Minnesota was the extension of the road laws to towns and cities. Cities, for all road purposes, were to be considered as townships in themselves. They were required to set up a system of officials corresponding to those of the townships for the enforcement of road laws. 11

In 1862 the legislature took away the power of the

10. General Laws, 1860, p. 87.

11. General Laws, 1860, p. 92, 93.

townships to alter or discontinue county roads by the passage of an act which declared that "every State road or other continuous road passing through or into more than one organized county, is hereby declared a county road, and shall only be altered, changed or vacated by an order of the board of county commissioners." County roads were placed under the supervision of the county commissioners, who might appropriate "such sums of money from the county treasury as they may think advisable, not exceeding one thousand dollars in any one year." More money might be appropriated and spent upon a ratification by the voters of the county, the funds to be expended upon bridges and county roads under the direction of the commissioners. A county road running through more than one township in the county might be located, established, changed, or vacated, upon petition of twenty-four freeholders in any county containing more than one hundred legal voters, or twelve freeholders in any county containing less than one hundred voters. Upon approval of the petition for the road, the county commissioners were required to notify the supervisors of the towns through which the road was to pass, and it then became the duty of the townships to open, alter, or vacate the road ~~in~~ question. Adequate safeguards for the owners of property affected by the change were provided, whereby the county had to pay the damages awarded. When once the road was constructed, it became

the duty of the townships through which it passed to maintain it. In 1865 the legislature amended the provision for appropriating money by the addition of a clause permitting an annual appropriation of "one thousand dollars to each five hundred thousand dollars of assessed valuation of real estate in such county." In effect, this increased the appropriating power of most counties, for the assessed valuation in many of them was in excess of five hundred thousand dollars. 12

The laws of territorial Minnesota had required that public roads be four rods wide. The same width was made the legal standard under the township organization law. The territorial law also had provided for the opening of cartways two rods wide, to allow owners of property off a public road to gain access to their land. The township organization law legalized cartways, but failed to set any standard of width for them. This the road law of 1860 did, by providing for the opening of cartways two rods wide under the same terms as those governing the opening of any other public road. In 1863 the legislature amended the provisions of the law applying to cartways by providing that the towns should bear the

12. General Laws, 1862, p. 138-141, 1865, p. 71. In 1862 fourteen counties had real estate assessed at five hundred thousand dollars or over. By 1863 nineteen were in this classification, and by 1867 twenty-five. See the reports of the state auditor dated January 1, 1864, December 31, 1864, and December 28, 1868, in Executive Documents, 1863, p. 476, statement R; 1864, p. 160, statement O; 1868, p. 406, statement J.

cost of surveying them, but that the individual for whom the cartway was laid out should pay all damages to property through which it passed, the amount of which was to be determined in the same way as in the case of public roads. If the land through which the cartway passed was enclosed, the owner was allowed to erect gates, and penalties were provided for leaving them open as well as for maliciously damaging them. ¹³

The road code of Minnesota was evolved over a period of many years. In 1867 a law regulating the establishment of ferries was adopted, which made unnecessary the cumbersome legal machine in force during the territorial period, and removed the difficulties that had produced trouble. The new law, for example, provided that a license to operate a ferry over a stream which served as a boundary between two counties might be obtained from either county, but that once obtained, "the county commissioner[s] of no other county shall have any power to exercise any jurisdiction over such ferry, while the same is in legal existence." To further safeguard the ferry operators, the law provided that if applications were filed in two counties for ferries at the same point, the person who made application first should have preference. Taxation only by the county commissioners in the county in which the ferry was located, at rates varying

13. Ante, p. 227; General Laws, 1858, p. 226, 1860, p. 92, 1863, p. 103.

from five dollars to two hundred dollars per year, was legalized, and the commissioners were likewise given the authority to regulate the rates of ferriage. Cities, villages, boroughs, and incorporated towns were given the privilege of licensing ferries within their own boundaries. To encourage adequate bridging of streams, the same session of the legislature adopted a law authorizing supervisors of organized townships to issue bonds for building bridges within their towns, and provided for the redemption of the bonds by taxation. ¹⁴

One other law was added to the body of road laws by the session of 1867. "An Act to legalize the building of free turnpikes in this State" provided that the county commissioners might construct such a road when a majority of the legal voters along the route which it was desired to convert into a free turnpike petitioned for it, and when voluntary pledges totaling at least two hundred dollars had been subscribed for every mile of the proposed turnpike. Free turnpikes were required to be laid out at least four rods wide, "and shall be bedded with stone, gravel or such other material as may

14. General Laws, 1867, p. 45-43, 53; ante, p. 239-242. The bridge bond law was amended in 1868 to correct an obvious slip in the language of the bill. The 1867 law provided that the vote of two-thirds of the legal voters of the town had to favor the measure. The amendment of 1868 provided that the vote of two-thirds of the legal voters of the town present at the meeting was required for this purpose. General Laws, 1868, p. 87.

be found on the line thereof, and faced with broken stone or gravel so as to form an even hard surface, with good and sufficient ditches on each side whenever the same is practicable; the arch or bed of such road shall be at least eighteen feet wide, and shall be so constructed as to permit carriages and other vehicles conveniently to pass each other, and to pass on and off of said turnpike where it may be intersected by other roads." In addition to the two hundred dollars per mile of road raised by voluntary subscription, the county commissioners were required to levy a tax annually for three years, amounting to one-third of the estimated cost, less one-third of the subscription. The tax was to be applied to the communities at either end of the road, and to householders living within one-half mile of the road on the first mile from either end, within one mile along the second mile, within a mile and a half along the third mile, within two miles along the fourth mile, within two and a half miles along the fifth mile, and within three miles along the remaining portion of its length. The subscriptions made to aid in building the road were to be paid in instalments, each not less than twenty per cent of the total amount, payable every sixty days. When the road was completed, the commissioners were required to levy an annual tax to keep it in good repair, and the road overseers along its route were to do

the work. 15

An important addition to the legal framework of the road system was made by the legislature of 1872, when an act was passed authorizing the judges of district courts to order the laying out of roads through two or more counties within their respective judicial districts. Under the terms of this law the judges were authorized to appoint commissioners to lay out such roads upon receipt of a petition signed by twenty legal voters resident in the counties. The judges, however, were not permitted to authorize any road laid out more than six miles outside their judicial districts, and a road could be ordered opened only after thirty days' notice had been publicly given in each county through which it would pass. The cost of laying out such roads, and of any damages to property consequent to its opening, was to be borne by the counties. Damages were to be awarded by the commissioners appointed by the court, and, in case of dissatisfaction with the amount awarded, property owners might have a jury trial upon written petition to the court, filed within thirty days of the awarding of the damages. The construction of judicial roads was to be performed by the townships through which they passed. In many cases this law obviated the necessity for going to the legislature for authority to open roads extending

through more than one county, and made possible a quicker procurement of needed roads. 16

In 1873 the legislature performed its periodic task of revising and rewriting the statutes of Minnesota. The revised statutes of 1873 gathered into one chapter the laws relating to roads which had been enacted since the last revision of 1866. Most of the amendatory acts were passed to clarify meaning, and did not greatly alter the law. Consequently, the revised law differed from the edition of 1866 chiefly because of the addition of the sections relating to free turnpikes, to steam traction roads, and to judicial roads. 17

In the local administration of road problems the new code extended the power of taxation for road purposes not only to real estate, but to personal property as well. The limit of such taxation was placed at one dollar for every hundred dollars of assessed valuation. If the township supervisors refused to lay out, alter, or vacate any highway, the code provided that, unless the

16. General Laws, 1872, p. 100; Walter S. Booth, The Township Manual for the State of Minnesota, 64, note a (fifteenth edition, Minneapolis, 1899). Where a road extending through or into two judicial districts was desired, according to an amendment to the law of 1872 made in 1889, judges were permitted to act in conjunction, and, if the road was decided upon, they appointed a commissioner from each county affected, not more than five in all, to lay out the road. General Laws, 1889, p. 296.

17. Minnesota, Statutes at Large, 1873, vol. 1, p. 513-527; ante, p. 255.

decision was appealed from within the thirty days stipulated by law, the petition could not again be considered for one year. There had been no statement in previous laws indicating the methods to be followed in appealing from the decisions of the supervisors or county commissioners where the road involved was a town line road, although the law of 1858 had stipulated in detail the way such roads should be laid out, and had provided a means of division so that each township should assume its share of the cost of construction and maintenance. The code of 1873 extended to town line roads the same rights of appeal which had been granted in cases of other township roads. Roads, under territorial laws as well as under state laws, had been limited to a width of four rods. This regulation was changed so that roads six rods wide might be laid out, provided that all the residents on lands along the road so desired. 18

Previous laws had provided a means for appealing from the decision of supervisors or commissioners regarding damages claimed as a result of the routing of a road through privately owned land. The law of 1873 rephrased the language of the existing laws, and added to them new features for which legislation had been provided during the intervening years. Henceforth no damages were to be allowed for property taken for road purposes if the land,

18. Minnesota, Statutes at Large, 1873, vol. 1, p. 515, 520, 521.

at the time the road was laid out, belonged to the federal government or to the state of Minnesota. Where a legitimate claim for damages existed, however, an appeal for adjusting them might be made at any time within three years from the date of opening the road. Two ways were provided for making appeals from the awards of the supervisors or commissioners. If the amount of the award was less than a hundred dollars, the appeal was to be made to a justice of the peace having jurisdiction. If the amount of damages claimed was more than a hundred dollars, the appeal was to be made to the judge of the district court. In all cases, the appellant was required to post a bond covering the costs of the appeal. A trial by jury was provided, and if the initial award of the town supervisors or county commissioners was upheld, he had to bear the costs of the trial. If that decision was reversed, the county or township, whichever the case might be, was required to assume the costs. ¹⁹

The code provided that in townships in which no public roads had been laid out, the section lines were henceforth to be considered as public roads, and might be opened to a width of two rods on each side of the line by the town supervisors without the necessity for any survey, excepting where natural obstacles prevented the straight line from being followed. The last section

19. General Statutes, 1866, p. 195-197; Minnesota, Statutes at Large, 1873, vol. 1, p. 523, 524.

of the act contained the provision for laying out roads upon order of the judge of the district court. This completed the road code of 1873. It differed from the previous codes in many places, but in the majority of cases these differences were differences in phraseology rather than in meaning. 20

Nor were the changes in the code during the next twenty years of great significance. It is true that the code of 1894 varies from that of 1873, but again the differences are not in the fundamental rules of procedure; rather they are differences in the methods of expressing the rules for procedure. The fundamentals laid down in the laws of 1860 remained the basis for the road code until the closing years of the century. The enactment of the law providing for the laying out of roads by the judges of the district courts was the last significant addition to the body of road laws until the good roads movement revamped the structure, and altered the public concept of the road system of the state.

That is not to say that there were no road laws enacted during the last twenty years of the old regime. Whenever special occasions arose which could not be met under existing laws, additions to the body of statutes were made. They did not alter the methods by which roads were opened or maintained; they applied the old prin-

20. Minnesota, Statutes at Large, 1873, vol. 1, p. 526.

ciples to new circumstances. An interesting example of this feature of the road laws is afforded by the measure, enacted in 1883, which provided for opening temporary cartways. This legislation was intended primarily to benefit the lumbering interests of the state, for it provided that whenever two or more owners of pine lands in the state desired a temporary cartway to be laid out they should petition the supervisors of the town through which the cartway would extend, or, if the township was unorganized, the petition should be addressed to the county commissioners, who thereupon would order it opened for the period of time specified in the petition. Such a cartway was to be not less than one, nor more than two, rods in width, and the petitioners were to pay all damages to property. The same session of the legislature passed laws intended to provide adequate measures to regulate the obstruction of highways by railroad trains, and an earlier session -- that meeting in 1879 -- had attempted to regulate the practice of seeding grass or other crops on the right of way of highways by permitting owners of such land to seed to within eight feet of the center of the road, provided that in so doing they did not interfere with its free use. Similarly, the legislature in 1874 had dealt with the problem of drainage for highways running through marshy land, by the enactment of a law authorizing the town supervisors to dig ditches, and providing compensation for the owners of the land

through which the ditches were dug by assessing damages in the same way as that provided for in laying out roads. The legislature had provided a special tax for county road and bridge purposes based upon the valuation of real and personal property, but the tax was to be expended upon the roads and bridges of the county by the commissioners. In 1891 this feature was changed to allow the commissioners to appropriate a sum of three hundred dollars or less from the county road and bridge fund for the improvement of roads and bridges in any township in the county. The money was to be paid to the treasurer of the town within which it was to be spent, when the latter officer had given bonds to guarantee the use of the money for the purpose for which it was appropriated, and it was to be expended by the town supervisors. ²¹

In 1867 the legislature had taken steps to regulate the authorization of ferries in the state by the counties. The session of 1875, in turn, laid down laws regulating the construction of toll bridges. The measure, intended primarily to establish certain standards in the construction of bridges over the Minnesota River, was extended to apply to the construction of bridges over "any lake or stream of water in the state." Companies wishing to build such bridges were required to conform to the laws of the state regarding corporations, and the privilege

21. General Statutes, 1894, p. 499; General Laws, 1874, 200-204, 1879, p. 94, 1883, p. 159, 181, 1891, p. 36.

of constructing bridges over the Minnesota River was extended also to "any county or counties, town or towns, village or villages, interested therein." Such bridges might be toll or free, as the builders desired, but the site of the bridge had to be approved by the governor, and, if a toll bridge was constructed, a standard of toll charges was set up which could not be changed by the legislature until the company was earning a net annual income equal to ten per cent of the fair and reasonable cost of the bridge. ²²

There were six kinds of free roads in Minnesota. The state, from which the other units of government derived their authority to lay out roads, could authorize the opening of state roads. ² Judges of the several judicial districts could authorize the opening of roads extending through two or more counties within their districts. ³ The townships were authorized to open roads wholly within the townships, while the counties could open roads within the ⁴county which extended through two or more townships. ⁵ Furthermore, county authorities were authorized to lay out and construct free turnpikes with-

22. General Laws, 1867, p. 45-48, 1875, p. 140. Previous to the passage of this bridge law, railroad companies had been authorized to construct bridges across streams for crossing their trains, and "to answer the ordinary purposes of travel and business." They were entitled to charge toll for the use of their bridges unless the bridge was erected within one mile of an existing toll bridge built by an incorporated company. General Laws, 1869, p. 94.

in their counties and roads designed for use by steam traction vehicles. For the purpose of altering or vacating, state roads were considered to be county roads and could be changed or abandoned only by the county commissioners. The responsibility for constructing free turnpikes and steam traction roads belonged to the counties, while the townships assumed the duty of constructing not only township roads, but state, county, and judicial roads as well. The responsibility for the maintenance of roads was likewise divided. County authorities were allowed to levy a tax for the maintenance of county and state roads, as well as of free turnpikes, but the labor tax of the townships through which these roads passed had to be employed on roads laid out by state, county, and judicial authority as well as on township roads, and was not exempted from use on free turnpikes. ²³

The legal code outlined the status of the roads, provided for their construction and maintenance, and gave their users certain inalienable rights and privileges. But the landowner, from whose land the ground for the road was taken and whose labor kept it in repair, had, in addition to his rights as a traveler over the roads, certain other rights and privileges inherent in the ownership

23. On page 64 of his Township Manual (1899), Booth says that the several kinds of roads in Minnesota "differ chiefly in their extent and the authority under which they are laid out, but when laid out and opened they are wholly under the care and superintendence of the supervisors of the towns in which they lie."

of the adjoining land. A southern Minnesota newspaper of the eighties summed up these rights, as well as the obligations which they entailed, in an article entitled "The Rights of Farmers."

Ordinarily the farmer owns the soil of half the road, and may use the grass, trees, stones, gravel, sand, or anything of value to him, either on the land or beneath the surface, subject only to the superior rights of the public to travel over the road. . . . No other man has a right to feed his cattle there, or cut the grass or trees; much less deposit his wood, old carts, wagons, or other things thereon. . . . The owner of a drove of cattle which stop to feed in front of your land, or of a drove of pigs which root up the soil, is responsible to you at law as much as if they did the same things inside the fence. Nobody's children have any right to pick up the apples under your trees, although the same stand wholly outside of the fence. No private person has a right to cut or lop off the limbs of your trees in order to move his old barn or other buildings along the highway. . . . No man has a right to stand in front of your land and whittle or deface your fence, throw stones at your dog, or insult you with abusive language, without being liable to you for trespassing on your land; he has . . . a right to use the road, but not to abuse it. . . . The farmer owns the soil of the road, even if he cannot use it for any purpose which interferes with the use of it by the public for travel. . . . If the road is discontinued or located elsewhere the land reverts to him, and he may enclose it to the centre and use it as a part of his farm. 24

During the territorial period of Minnesota's history, and for many years after statehood was attained, the primary interest of the state in the development of the communication facilities of the frontier commonwealth was accepted. The first territorial law regarding roads had recognized this authority in road matters

by laying down rules for the legislature to follow in laying out roads, and had provided that the legislature pay the cost of this important task, but not that of the equally important task of constructing them. The legislature which met in 1851 was almost without funds, and in response to the warning of the territorial auditor against the practice of financing such roads, the legislature restricted itself.²⁵ The territorial code provided that the legislature might order roads laid out only when they passed beyond the borders of a county and were petitioned for by residents of both counties. Bills for roads authorized by the legislature thereafter provided that the cost of laying them out should be borne by the counties through which they passed. At the same time that these restrictions upon the authority of the state and territory were being imposed, the power to lay out roads within the counties was delegated to the smaller unit of government. This delegation of authority in no way impaired the right of either the territory or the state to control the administration of roads, nor were any laws passed during the succeeding quarter century for that purpose. The laws establishing the township system of local government in Minnesota, however, delegated to a still smaller unit of government the power to lay out roads within the township, and the passage of

25. Report of the territorial auditor, December 31, 1850, in Council Journal, 1851, p. 182.

the act authorizing the judges of district courts to lay out roads in two or more counties within their judicial districts, together with the supplementary acts to enable judges of adjoining districts to act in concert to lay out a road through two or more such judicial districts, provided the machinery for caring for most contingencies arising from the need for opening, relocating, or vacating roads within the state. They created a machine which made direct legislative action unnecessary.

In 1891 the legislature voluntarily signed away its right to enact special laws authorizing the laying out or vacating of roads. An amendment to the state constitution was proposed that year to limit the vast amount of special legislation which was growing year by year. The amendment which the legislature drew up for submission to a popular vote prohibited eleven kinds of special legislation, the second of which was that for "laying out, opening or altering highways." The third item in the list of forbidden special acts was that to license ferries across streams wholly within the confines of Minnesota. The eleventh class of special legislation which was forbidden was that pertaining to the vacating of roads, town plats, streets, alleys, and public grounds. The measure was adopted by a popular vote on November 8, 1891, as sections 33 and 34 of article 4 of the constitution. The amendment remained in force for a period of ten years, and was superseded in 1892 by a

new amendment, the purpose of which was the same, but which was even more sweeping in the prohibition of special legislation. 26

This restriction of the legislature to lay out roads had a greater significance than merely that of cutting down on special legislation. Minnesota was progressing beyond the frontier stage. During the period when vast areas of the state were unoccupied, there was no organized local government to supply the system of roads which a frontier country needed. The provision for an increasing amount of local, or decentralized, control in the building up of a communication system led almost inevitably to the withdrawal of legislative control. But the withdrawal of the state also typified the indifference to wagon roads as a matter of state concern which prevailed in the United States as a whole during the last thirty years of the nineteenth century. The railroads replaced the long-distance system of wagon roads in the category of human needs. The result was that "the administration of highways ceased to be in any real sense either a national or State function, but was transferred to the various local units of government." That the transition to this

26. General Laws, 1881, p. 21-23, 1891, p. 19-21; Harold F. Kumm, The Constitution of Minnesota Annotated, 97-111 (University of Minnesota, Bureau for Research in Government, Publications, no. 3 -- Minneapolis, 1924); Anderson and Lobb, History of the Constitution of Minnesota, 169.

phase of road history in Minnesota came almost twenty-five years later than it did in the neighboring state of Iowa is at once an indication of the more slowly growing railroad system, and of the lasting influence of the frontier. 27

27. Brindley, Road Legislation in Iowa, 106, 268. Iowa forbade the enactment of special road laws as early as 1857.

VIII. THE COUNTRY ROADS OF MINNESOTA

Within very recent years a resident of a Minnesota community not long past the frontier era commented that "all of America was developed by people who lived in imperfect houses, lacked proper tools, suffered plagues of mosquitoes, toiled over boggy roads and in general had to put up with a whole host of annoyances and inconveniences." ¹ The pioneers of a new country accepted the fact that upon them fell the burden of laying the foundations for society in a new setting. The generations that came after them accepted no less stoically the task of improving what the pioneer age had bequeathed to them. They had to tear down the log houses of the frontier and erect on their foundations the frame or brick homes of permanent settlement. They had to fence the fields and level the forests which the hurrying frontiersmen had not had time to conquer. All the temporary pioneer structures had to be replaced by the permanent equipment of the new age.

The program of change and improvement extended to the highway structure of Minnesota as well as to the rest of the organization built up in the pioneer stage. The winding trails of the frontier were straightened

1. Bemidji Daily Pioneer, July 10, 1935.

and made to follow the conventional lines of civilization. Where a hastily built corduroy had been thrown across a swampy area which could not be circumvented, a permanent grade was built. Where the pioneers had crossed a stream by means of a hazardous ford or a tricky ferry, the new age built a bridge.

In spite of improvements, the roads of Minnesota were far from ideal throughout the nineteenth century. Even as travelers over the pioneer trails had found them obstructed by stumps or boulders, so the travelers of the later age found the highways to be "frost laden and wet and soft and soggy in spring and fall, dry and dusty in summer, and rough the year round." The experience was as regular as the season. The summer traveler knew when he started on his journey -- whether it was to be a mile or two to an adjacent neighbor or town, or two hundred miles to the new frontier -- that the roads would be dusty, or, if a hard thundershower came up, unpleasantly muddy. One summer traveler complained of "the rough and disagreeable condition of the roads" after a period of heavy rainfall. He went on to explain that "during the recent unparalleled wet spell, the roads had been badly cut up by the passing vehicles, and now being measurably dry, the deep ruts and hardened clods make them sorry passages for either pleasure-riding or moving heavy loads." His sympathies went out to the drivers of the forty or more loads of wheat he encountered on

his trip. That rain and mud interfered with the conduct of business in the rural communities is evidenced by a statement of a representative of the McCormick Harvesting Company at Rochester, made in August, 1867, to explain his inability to sell his quota of harvesters:

"All the beginning of the season up till the last of June, was of rain, breaking up the Rail Road and making the wagon Roads almost impassable so that all traveling or most of it -- & canvassing have been suspended. For awhile both Farmers and Merchants looked blue." The plaint was echoed by the firm's representative in Hastings. Occasionally a traveler was found who reveled in summer travel. A Rochester man, for instance, wrote of a summer trip from that town to Owatonna: "Staging is endurable, railroad riding is enjoyable, but for the best way of getting over a country commend us to a covered buggy and a span of good horses. It is luxury to ride along at this season and enjoy the 'sweet fields dressed in living green.'" 2

The traveler over those selfsame roads in the fall of the year knew that he faced similar conditions, or

2. Northwestern Agriculturist, 9: 210 (July 15, 1894); Rochester Post, July 14, 1866, May 13, 1871; letters of John Rhodes and John Edgar to the McCormick Harvesting Company, dated June 10 and August 8, 1867, respectively. The originals of these letters are in the possession of the McCormick Historical Association at Chicago. The Minnesota Historical Society has microfilm copies of them.

worse. If the roads were hardened by frost before they had a chance to dry after the autumn rains, he could expect to find them "turned into nutmeg graters on a large scale which rasp the feelings . . . to the last degree." He could rest assured that such "rough and rugged" roads would "cure dyspepsia and make business for wagon and blacksmith shops." If the weather remained cold and dry, however, he knew that the deepest ruts would be worn to a semblance of smoothness before snow fell, and if it chanced to be an election year, he could jokingly attribute the good condition of the roads to the politicians who "have kept them smoking hot for the past few days." If he was young and zestful, he might think that "there was never a nicer day for riding. . . . It was the perfection of autumn weather; just cold enough to make overcoats and buffalo robes comfortable and the roads were faultless." ³

Winter brought problems all its own, for the snow, drifting before the wind, altered the topography of the country to a dismaying degree. Where a little cut through a hillside made a depression, or where fences or hedges or trees lined the sides of the road, the snow piled up in drifts through which teams could not pass,

3. Preston Republican, November 4, 1880, October 6, November 17, 24, 1881; Rochester Post, November 9, December 7, 1867; Renville Star Farmer, November 6, 1896; Freeborn County Standard (Albert Lea), October 27, November 10, 1881, December 5, 1888.

while on an adjacent hilltop the autumn stubble might be exposed to view. Then, "the traveled roads through the country do not follow the highways, but wander across the fields in about as crooked directions as a Virginia worm-fence. Riding over the plowed ground is not so pleasant as fancy pictures a winter sleigh-ride." A little less fanciful, but equally graphic, was the following description of winter roads. "From all accounts, the condition of the roads throughout the country is anything but desirable. In fact, the roads proper, in many localities, are absolutely impassable, the late wind storm packing them completely full of hardened snow, and compelling travelers to pick their way over fields and 'across lots.' Taking the hard and irregular snow formation together with the patches of bare ground, rough and frozen, a smooth and easy sleigh track is out of the question." ⁴

If the drifts were deep enough, hardship might ensue for farmer and villager alike, for the farmer could not get to the village to buy his groceries, and the villager often found that his woodpile, to replenish which he had to depend upon the farmer, faded away before the onslaughts made necessary by the cold. But beyond this danger of exhausted fuel and food supplies lay the graver one of death by freezing. The traveler

4. Preston Republican, February 24, 1881; Rochester Post, January 18, 1873.

might set out from his home on a bright winter day, to be overtaken without warning by the blinding cold gray cloud of snow and wind which so often spelled death to those who were unable to find shelter from its fury. The blizzards were the peculiar and dreaded danger of the western prairies, and countless travelers perished in them. ⁵

The approach of milder weather brought more trouble to the traveler, for the warm sun of mid-February worked havoc with the winter roads. Where the runners of many sleighs had passed, the snow was packed into icelike tracks which yielded slowly to the rays of the sun, while on either side of and in between the tracks the unpacked snow melted rapidly. The result was that the winter road stood out in bold relief, a foot or two feet higher than the adjacent snow. Then "getting into

5. Fillmore County Republican (Preston), January 17, 1873; Preston Republican, February 16, 1882; L. O. Larson, "Some Early History of This Vicinity," in the Harmony News, December 13, 1928. The latter is a reminiscent account. The diary of John Cummins, a farmer living near Eden Prairie in Hennepin County, describes in numerous places the difficulties of winter travel. For example, his entry for January 13, 1873, is as follows: "Cloudy, rather cool. Went over on the road to Minneapolis to see the chance to get to town. The roads toward town is drifted for half a mile at least six feet deep." On March 6, 1874, he records a blizzard that effectively prevented travel until March 10. The Cummins Diary is in the possession of the Minnesota Historical Society. See also the entries for March 7 to 10, 1874. E. N. Brooke of Red Wing, in a letter dated February 10, 1868, to the McCormick Harvesting Company says: "The roads are full and deeply drifted [with] snow, making traveling with a load very difficult." See also Rhodes to the McCormick Harvesting Company, January 5, 1867.

and out of town as is commonly practiced in sleighs is a labor of difficulty. . . . The roads are from six inches to two feet above the snow yet, and the loads that get here without an upset, over some of them, are the exception. Geo. Fisher, -- and he is a good teamster, too, turned over his load of wheat seven times coming in from . . . five miles south of the village." The alternate melting and freezing and the not infrequent winter rains covered the roads with ice. Then, indeed, was the traveler in difficulty, for even travel-wise horses shod with sharp-calked shoes found the footing uncertain, and sleighs and cutters slued and skidded over the glary surface. The wise man stayed home in such a season, going out only when necessity required. ⁶

It was the springtime, however, which brought the greatest woe to travelers. Each year there were from four weeks to three months during which teamsters dreaded the thought of venturing on the roads. It was the season of the "mud blockade," which began as soon as the snow left the ground, and often lasted until the spring sun had dried the mudholes in which the water from melting snows and rains had gathered. "The weather has been in

6. Preston Democrat, February 5, 1885. On March 10, 1873, Cummins recorded in his diary: "Hauled a load of wood roads none of the best, as the track on the N. side cuts off, making the going rather bad." His entry for February 11, 1880, records a rainstorm. The following day he complained that "everywhere there is ice, making the travelling very difficult."

the melting mood for the last week," said the editor of a southern Minnesota newspaper in the spring of 1866, "and the rapidity with which drifts have changed to puddles is wonderful. . . . In the country, those who have had the hardihood to try them, say that the roads are provokingly horrible, giving the traveller his choice of mud, snow or water." Another southern Minnesota reporter declared that the warm weather which came unseasonably in February, 1882, "has not only brought the snow to grief, but has also brought grief to the hearts of those who are obliged to drive over the roads. The 'going' Saturday was bad, and Sunday made it worse." Jane Grey Swisshelm, editor of a St. Cloud newspaper, tells of a journey that she made at the end of March, 1862, from St. Paul to St. Cloud. Her stagecoach started out "through the snow drifts which appeared to defy wheels, and the mud which set runners at defiance." When the journey was partly completed, the stagecoach was exchanged for a sleigh, but the sleigh bogged down in the rapidly melting snow, and the passengers were obliged to spend the night on the road, waiting for a rescue party to force its way through five miles of knee-deep slush. ⁷

7. Rochester Post, March 3, 1866; Preston Republican, February 16, March 2, 1882; Arthur J. Larsen, ed., Cru-sader and Feminist: Letters of Jane Grey Swisshelm, 1858-65, 153-158 (Minnesota Historical Society, Narratives and Documents, vol. 2 -- St. Paul, 1934).

As the snow melted away, the frost left the ground, and warm spring rains flushed away the debris of winter. Then brooks and rivers became raging torrents, which wrought havoc with bridges and roads and everything else within their reach. The incautious traveler might find, as did a Mankato physician, that no bridge spanned the stream he sought to cross, although a sturdy one had been there a few hours before. He counted himself lucky that he escaped with his life, and doubly so that he was able to rescue his team. It was a commonplace event, in some places almost an annual affair, that the spring freshets swept away the wooden bridges, and that new ones had to be built.⁸

The dangers and inconveniences to travelers from washed out bridges were minor troubles for the traveler in the spring of the year. It was the mud -- "the beautiful mud" -- that vexed him most. "A steady thaw of forty-eight hours has melted the snow, and set it running towards the Mississippi river, and the teamsters are unhappy," observed one editor during the spring of 1882. The following week, he voiced the opinion that "the roads are most awfully utter," and a short time later he defined the condition of the roads as "almost a mud blockade." Another editor, after gazing at the April scene,

8. Mankato Daily Free Press, April 8, 21, 1888; Preston Republican, March 3, 1871; Glencoe Register, June 16, August 18, 1870; Mapleton Enterprise, March 10, 1893.

declared, "This part of the world is one vast sea of mud." Mrs. Swisshelm, on a tour of southern Minnesota during the spring of 1860, found that "about half the road [from Chatfield to Preston] was so bad we had to get out and walk around the worst places, but it was only 15 miles and we got there before dinner." The stage had left Chatfield in the early morning.⁹

For weeks after the snow had left the ground, "mud, measels [sic] and puzzles" were "staple articles" as the muddy roads held traffic to a minimum. "Nobody in these parts has found out just how deep the mud is now," a correspondent for the Preston Republican declared after the country had experienced a siege of rainy weather, and more than one teamster sympathized with the disgusted driver of a stagecoach plying between Chatfield and the near-by town of Fountain, who threatened "to trade off" his "stage for a steamboat," if that vicinity was visited by another rain that week.¹⁰ "A report has reached us that it is quite muddy about Amboy," wrote the editor of the Mapleton Enterprise in the spring of 1891. "The stuff is also reported quite plenty in and around Minnesota Lake. As for our own sweet locality -- why a good four horse team seldom gets stuck on business

9. Preston Republican, March 2, 9, 23, 1882; Hutchinson Leader, April 28, 1893; Larsen, ed., Crusader and Feminist, 75.

10. Preston Republican, April 8, 1880.

streets." ¹¹ A central Minnesota resident, returning from a trip to Albert Lea and the southern portion of the state, declared that he had seen "enough mud to run a dozen old-fashioned political campaigns. . . . Teams become mired in the main streets, farmers cannot leave their homes and travel except by foot or horseback is suspended." ¹² The editor of the Blue Earth City Post, describing the roads in the vicinity declared that "The roads in the country surrounding Blue Earth City are in a very bad condition. Perhaps not as bad as they were last season, but they are getting there as fast as possible." And this followed in close succession his boast that "never in our recollection has winter vacated the lap of spring with greater alacrity than he did during the past week. The alliance is apparently declared off and there doesn't seem to be much mud-slinging in connection with the affair either. In fact the roads that usually have a great deal to do with the 'lap-lingering' business have effectively dried up." ¹³

Even when spring definitely had arrived, the troubles of the travelers were not over, for, during the month or two months that had intervened between the disappearance of the snow and the arrival of summer weather, the passage

11. Mapleton Enterprise, April 17, 1891. Amboy is a village in Blue Earth County, and Minnesota Lake is in the neighboring county of Faribault.

12. Hutchinson Leader, May 13, 1892.

13. Blue Earth City Post, April 6, May 11, 1893.

of numerous vehicles had cut deep ruts in the roads. Mudholes, which were formed in every depression, lingered on for weeks after the remainder of the road became passable, and vehicles churned the mud into a glue-like substance from which teams scarcely could extricate themselves when hauling an empty wagon, and in which they were hopelessly bogged when drawing a load.

During the pioneer period of Minnesota's development, bad spots of this kind had been avoided by passing around them. With the growth of settlement, however, the government lands were transferred to individuals, and farmers took full advantage of their rights to the land by cultivating it almost to the limits of the wagon track, or by fencing off the old trails which led around the bad spots, leaving the traveler "to make his way" as best he could "through and around sloughs, often getting his team down in the mud, and suffering great inconveniences otherwise." One abomination to travelers could have been eliminated if grass had been planted along the side of the road, for they found it very "annoying to have to travel along with main track a sea of mud, and both sides made up of freshly plowed land, which is even worse to travel over."¹⁴ More than one of them agreed with the poet who gave voice to this

14. McLeod County Register (Glencoe), June 4, 1868; Glencoe Register, May 8, 29, 1873; Carver Free Press, June 4, 1885; Hutchinson Leader, May 5, 1893.

lament over the condition of the roads:

The pathway of life may be narrow and steep
 But the road through the country is steeper
 The pitfalls and snares that beset us are deep
 But the mud that surrounds us is deeper.

There are fence rails for bridges and mudhole[s] for drains,
 And hard heads and boulders for gravel;
 And broken down buggies, on hillside and plains,
 Give warnings, like ghosts, as we travel. ¹⁵

It was not that Minnesota's pioneers failed to appreciate the value of good roads. As a matter of fact, they thought that the roads over which they traveled were, generally speaking, good ones. They had no concept of any different kind of roads, save only the still rougher roads of an earlier era. A pioneer of southern Minnesota describes the situation in these words:

The first roads were laid out where they could go without doing any work on them. But when the country became more settled the roads were put on the lines. Enough work was done on the side hills and the roughest places to make them passable. Where they went thru a grove the timber was cut close to the ground and that made a very rough road. The stumps were hard, the ground between them soft, so the wagon cut a deep hole or rut between the stumps. Over that kind of road it was pretty hard to rock along at the slowest pace. But after a few years the stumps were grubbed out and the road plowed. And that we called a great improvement which it was. ¹⁶

In another account of pioneer roads, the following description is given:

15. The poem, entitled "The Country Road" and written by Wilder Grahame, appears in the Aitkin Age for December 17, 1892, where it was reprinted from the Good Roads magazine.

16. Larson, in Harmony News, December 6, 1928.

The first settlers . . . knew that to build a good road, drainage was a first essential. But . . . what can be done to make roads when there is no money, and a dollar is as big as a cart wheel. . . . To grade, and fill and bridge across the many sloughs taxed to the utmost the energies and pocket books of the settlers. . . . We thought we had done a great thing . . . when we were able to lay down a stretch of corduroy and get a thin streak of dirt across it. Then we kept filling it from year to year as we could. ¹⁷

These two accounts show the attitude of Minnesotans toward the roads of the post-Civil War period; they felt that they were making as good roads as their facilities permitted. The evils of winter snow and ice, of spring and autumn mud and water, and midsummer dust were accepted with as much equanimity as was the weather. They were heaven-sent, and as the farmer accepted the effect of the weather upon his work in the fields, so he accepted its effect upon the roads. "Went to Minneapolis," commented one farmer in his diary. "The rain yesterday did not interfere with the roads." A short time later he wrote, "Quite a heavy rain this morning, got started to town but was lucky enough to get under shelter. The roads were very muddy." ¹⁸ That was all he had to say on the subject. It was the townspeople who were inclined to be most critical. The farmer, on his part, considered the country roads as his roads. They were taken from his land; he worked on them and traveled on them. If taxes were levied for their upkeep, they were paid from

17. Wadena Pioneer Journal, December 15, 1927.

18. Cummins Diary, June 5, July 8, 1874.

his pocket, and he excused the condition of the roads by comparing the large area over which his money and labor had to be distributed with the restricted area of the city streets. 19

If the roads of Minnesota were bad, it must be remembered that very real difficulties beset those who sought to improve them. Minnesota in many respects was in the earliest of the post-frontier stages, and much of its area was in a wilderness condition until the end of the nineteenth century. Such a region scarcely could have been expected to be wealthy, and the post-frontier problems of "putting the roads on the lines," involving the expenditure of comparatively large sums for the payment of damages to the owners of property affected by the changes, and of building bridges over the numerous and troublesome streams of the state exhausted the available funds.

It cannot be said that the local units of government did not use their power to tax. The editor of the Mapleton Enterprise in Blue Earth County, reviewing the tax history of his community, found that the only tax ever levied had been for roads and bridges. All other revenue came from license fees. A citizen of Alexandria, in Douglas County, boasted in 1872 that "the people of Alexandria taxed themselves liberally for roads." In

19. Hutchinson Leader, April 15, 1892.

1878, when the county commissioners voted a county tax for roads and bridges amounting to fifteen hundred dollars, the editor of the Alexandria Post praised them, saying, "The action of the County commissioners in making sundry appropriations . . . for the improvement of the principal roads leading to the county seat, commends itself to the public. . . . Good roads are a prime necessity, no longer to be overlooked." The people of Aitkin County, just emerging from the frontier stage in the early eighties, likewise appreciated the need for spending money liberally for roads. "Of equally as much importance to Aitkin as her railroads and steamboats," said one of them, "are the wagon roads which are now being built into the country in every direction. It takes both time and money to build good wagon roads." In McLeod County the action of the county commissioners in increasing the road and bridge tax from one thousand to three thousand dollars was hailed as a manifestation of good sense to which "farmers will say amen." ²⁰

The road tax was not a heavy burden in itself -- the law carefully prescribed its maximum -- and a certain amount of cash income was always flowing in from delinquent labor poll tax payers. Yet to poverty-stricken, debt-ridden farmers who were beset at not

20. Mapleton Enterpriser, April 24, 1891; Alexandria Post, May 4, 1872, July 26, 1878; Aitkin Age, December 29, 1883; Hutchinson Leader, July 29, 1892.

infrequent intervals by financial panics, drouths, hailstorms, or grasshoppers, any tax at all often was regarded as too much. Only the year before the citizen of Douglas County boasted of the high taxes levied, the editor of the Alexandria Post had declared that only six townships in the county "levy any road taxes," and during the year in which he spoke there were but five of the twenty townships in the county that assessed any money tax at all. During the decade of the seventies, in fact, no township except Alexandria appears to have levied a money tax every year, and for most of them road taxes were assessed during but three or four years of the decade, while three townships failed to exact any form of money tax for roads and bridges. The amount of the tax varied widely in the different townships, with three-tenths of a mill being the smallest recorded assessment in Douglas County for that period, and six mills, the highest. That was typical of the state. One township, as was the case in Preston Township of Fillmore County in 1880, might levy a cash tax of six hundred dollars, while its next door neighbor, with similar problems, sought to raise only a hundred and fifty dollars, or, conceivably, nothing at all. No township taxed itself for roads and bridges unless it had to, and, unless emergencies arose in the form of bills for materials for bridges, or for the payment of damage claims because of

the location of roads, it was the usual practice to levy no tax. ²¹

When ordinary tax avenues were insufficient to provide the funds for necessary roads or bridges, a community sometimes got legislative sanction to levy a tax for such purposes. Thus, five townships in Fillmore County were authorized in 1865 to levy a special six-mill tax for constructing a bridge over the Root River at Rushford. ²² Township and county often worked hand in hand to provide the needed facilities. In Douglas County, for example, when a new bridge -- 260 feet in length -- was to be built over the Chippewa River at a cost of eight hundred dollars, the county contributed a hundred and fifty dollars of the cost, and the township raised the remaining sum by taxation of its own property. Sometimes the amount available through taxation fell short of that required for road or bridge construction, and in such cases the township or county, or both, not infrequently contributed a portion of the cost, and left the remainder to be raised by private subscription. In 1882, when a new bridge was constructed over the Root River in Fillmore County at Peterson, the county contributed three hundred dollars toward the cost of a twenty-five hundred

21. Alexandria Post, February 4, December 16, 1871, December 4, 1872, November 29, 1873, November 27, 1874, December 3, 1875, December 15, 1876, December 14, 1877, December 20, 1878, October 3, December 12, 1879; Preston Republican, April 8, 1880.

22. Special Laws, 1865, p. 178.

dollar structure, and the balance was raised by subscription. When funds were not available in either township or county treasuries, the expedient to which the frontiersmen had resorted -- construction entirely by private contribution -- was again brought into use. McLeod County afforded an illustration of that practice as late as 1891, when almost three hundred and fifty dollars was contributed to build a road for which no town or county funds could be obtained. ²³

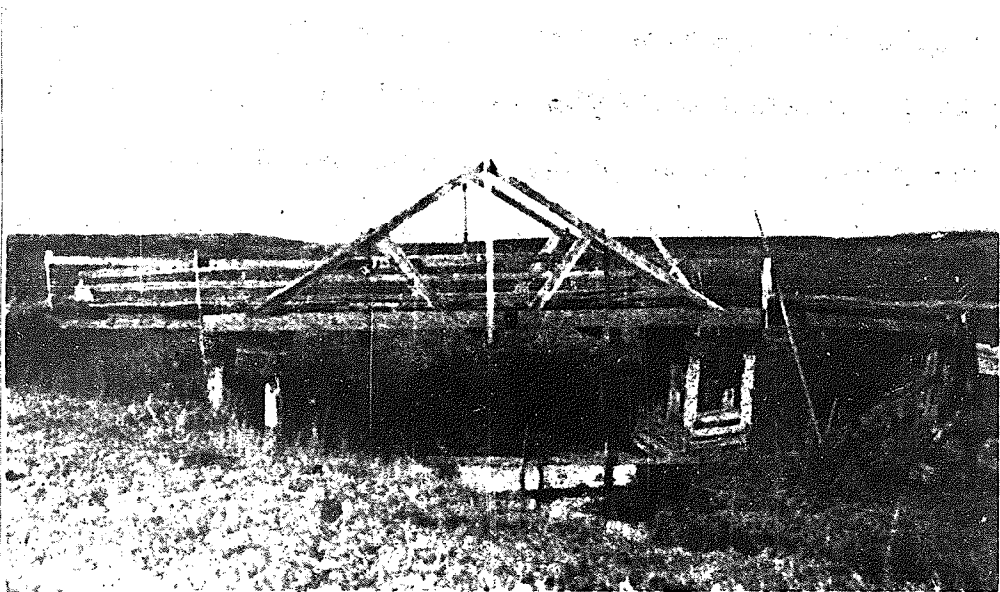
The major item in the cash road and bridge bill of the local units of government in Minnesota was the cost of building and repairing bridges. The structures thrown across streams by the frontiersmen were generally makeshifts, which lasted but a year or two, or at most a dozen years. They were made of wood with foundations so insecure that the first spring flood was likely to wash them away. The next generation built bridges a little better to look at, but with understructures as crude and makeshift as those made by the pioneers. Because wood continued to be the principal material used for bridges, they were not a great deal more durable than those thrown hastily across the streams in the hurrying frontier age. But wood was cheap and plentiful, and in many cases the beams for a bridge might be

23. Alexandria Post, December 10, 1870; National Republican (Preston), November 30, 1882; Hutchinson Leader, July 24, 1891.

taken from a farmer's wood lot for the asking. Farmers, working out their road taxes, could erect a wooden bridge of sorts without difficulty, and they could repair such a structure readily. "Culverts and bridges were built in the simple ways of the backwoodsman's art," one veteran of early road-building days recalled. The type of structure was built which could be put up with the least initial cost and which could be maintained with the least trouble and expense. Even so, the cost of materials for bridges in many portions of rural Minnesota must have been great. One township in Blue Earth County -- Medo -- had no fewer than seventeen bridges to build and maintain. Two of them were more than eighty feet long, and the average length of the remaining fifteen was thirty feet. ²⁴

The inadequacy of the type of bridge erected during the early years of Minnesota's history was not overlooked by the people. The matter of expense, however, was the deterrent factor in the construction of better ones. In the United States as a whole, however, the use of iron in some form or other as a material for bridge construction had increased during the nineteenth century, and after the middle of the century it was used extensively. Iron bridges did not appear in Minnesota until the early seventies, but during 1872 at least two bridges

24. Mapleton Enterprise, March 10, 1893; Farm, Stock and Home, 18: 264 (June 1, 1902).



Built in 1880.

MINNESOTA BRIDGE BUILDING BY POLL TAX LABOR
[From State Highway Commission,
Reports, 1912-13, p. 16).]

with iron frameworks were put up in the state, and by the end of the decade the more substantial material was used in lieu of wood in almost every large structure that was built. ²⁵ Experience showed that, while the initial cost of the new material was greater, the durability of iron bridges, the cheapness of their maintenance, and their resistance to the ravages of floods more than made up for the difference in first cost. Yet, advocates of iron bridges constantly had to fight not only those who honestly favored wood because of its initial cheapness, but "narrow-minded political demagogues, who, assuming that a large portion of the public are not posted on the subject, are trying to make political capital out of it, and a hobby upon which to ride into public favor." One adherent of iron bridges made a comparison between the two types of bridges in these words:

In 1866 -- just 19 years ago -- the first bridge was built over Crow river in that town [Frankfort Township in Wright County]. Since then the town alone expended in repairing and rebuilding these bridges nearly, if not quite, one-half of the entire cost of the projected iron bridges, and even then was part of the time without safe or passable bridges. . . . Substantially built wooden bridges . . . would cost more than their advocates claim, and with the necessary repairs during the 10 or 12 years that they would last at the utmost, would

25. Encyclopedia Britannica, 4: 131 (fourteenth edition -- New York and London, 1929); Isaac Atwater and John H. Stevens, eds., History of Minneapolis and Hennepin County, 1: 351 (New York and Chicago, 1895); post, p. 308n.

be nearly, if not quite, equal to the cost of iron bridges, when the latter would be as safe and as good as when first built. In all well managed towns, cities and counties, wherever the means admit it, iron bridges take the place of wooden ones, from the fact, no doubt, that they are safer, more durable and in the end cheaper than wooden bridges. 26

The practice of building iron bridges spread rapidly. During the seventies and early eighties, for example, Blue Earth County engaged in a campaign of bridge building which involved the expenditure of almost \$163,000. During the sixteen-year period from 1869 to 1885, twenty-nine bridges were built by the county, five of which were wood, and the remainder, iron. The first iron bridge was completed in 1872 at a cost of \$5,558, and during every year of the period, with the exception of 1871, at least one bridge was built. The program involved the levying of a special one-mill tax, authorized by the people at a special spring election in 1869, and it gave the county the "largest and best system of bridges of any county in the State." If other counties failed to engage in programs as extensive as this, it was because their needs were less, for few counties had to cope with topographical difficulties as great as those in Blue Earth County. 27

26. Delano Eagle, May 21, 1885.

27. Review (Mankato), November 27, 1883, March 31, 1885. The latter issue contains the report of the county commissioners for the year ending March 1, 1885, in which is published an "Appendix Showing Cost of Bridges Built in Blue Earth County up to March 1, 1885." The appendix shows when bridges were constructed, their locations, their cost, and the type of material used in building them. See also Mankato Union, April 2, 1869, March 24, 1871.

Although numerous toll bridge companies were organized to build bridges, most of the bridges in Minnesota were built and paid for by the people themselves, and for the most part it was the counties and townships which had to assume the burden, for the state constitution forbade the state to engage in works of internal improvement or to contract debts for that purpose. Congress, however, had not been unmindful of the difficulties which beset new states in making internal improvements. When statehood was granted to the territory, the government agreed to give the state five per cent of the proceeds from the sale of public lands within the state, if the state would promise never to tax lands within its confines owned by the federal government. That money was to be spent for the construction of roads and other internal improvements. The idea behind this grant was not a new one. Every state which had been admitted to the Union from the time Ohio became a state had made a similar bargain with the federal government. In some instances the amount allowed the states was reduced to two or three per cent, but it was an established procedure that Congress used to forestall the taxing of unsold lands. On the part of the state, the bargain was a good one, for the amount of revenue to be gained from taxing wild lands would have been inconsiderable. 28

28. Thomas Donaldson, The Public Domain, 238 (46 Congress, 3 session, House Executive Documents, no. 47, part 4 -- serial 1975).

In addition to the five per cent fund, there was another source of income which potentially was available for internal improvements. As a part of the grand gesture made by Congress upon the attainment of statehood by Minnesota, the title to all overflowed or swamp lands within its borders passed to the state. The only string attached to the gift was that the proceeds of the sale of swamp lands should be devoted to making them arable. It was estimated at the time that more than a million acres of Minnesota lands would be eligible for selection under the terms of this grant. Governor Ramsey, in his message to the legislature in 1860, advised that at least a portion of the proceeds from the sale of these lands be set aside as a road fund for the counties, "in proportion to the amount of the fund received therefrom." His recommendation was not followed, but it provided the germ of an idea, and in 1862 ten thousand acres of swamp lands were offered in payment for opening a road from Madelia -- then on the frontier -- southwestward to Sioux Falls. The road was opened, but the contractors never received their full pay, for only slightly more than forty-five hundred acres of swamp lands could be located within the limits of the grant along the right of way. That was the only swamp land grant made by the legislature to aid in opening wagon roads. Most of the balance was deeded to railroad com-

panies and corporations which, presumably, promised to make the lands arable. 29

Minnesota received its first payment from the federal government under the terms of the five per cent grant in 1861 after Governor Ramsey had urged the legislature to take steps to see that the payments were made. 30 The first payment amounted to a little more than thirty-five hundred dollars, and when the second payment was made in 1863 it added less than a thousand dollars. Thereafter, an annual income varying from a little over a thousand dollars to almost sixty-five thousand dollars came to the state from this source. At first it was restricted to a payment of five per cent from the proceeds of lands sold for cash. Minnesota and other states receiving the same sort of payments felt, however, that the percentage should apply to all lands sold, whether for cash or for land warrants. They also contended that, when lands formerly included in Indian reservations were sold, the states in which the lands were located should receive

29. Statutes at Large, 9: 519, 12: 3; messages of Governor Ramsey to the legislature, January 9 and 26, 1861, in Minnesota, Executive Documents, 1860, no. 1, p. 23, no. 14, p. 12; Special Laws, 1862, p. 315; reports of the state auditor, in Minnesota, Executive Documents, 1874, vol. 1, no. 4, p. 51, 1876; p. 334; Folwell, Minnesota, 3: 119n. In 1881 an amendment to the state constitution provided that the income from the swamp lands should be added to the school fund of the state. Anderson and Lobb, History of the Constitution of Minnesota, 183.

30. Message of Governor Ramsey to the legislature, January 9, 1861, in Minnesota, Executive Documents, 1860, no. 1, p. 13.

the regular five per cent payment. In 1874 the legislature authorized Governor Cushman K. Davis to appoint an agent to negotiate with the federal government for these funds. He appointed General John B. Sanborn of St. Paul and contracted to pay him five per cent of the money that he could obtain without contest from the government, and fifteen per cent when payments were disputed. In all, during the thirty-five years from 1861 to 1896, Minnesota received from the federal government as a royalty on lands sold within the state a total of \$361,263. To a state but little beyond the frontier stage, the sum was a very respectable nest egg. 31

31. The receipts by Minnesota from the five per cent fund from 1861 to 1896 were:

1861	\$ 3,555.17	1879	\$ 4,144.68
1863	948.07	1880	4,121.10
1866	4,595.19	1882	17,938.39
1867	2,500.53	1884	31,507.06
1868	2,475.67	1885	64,416.03
1869	2,710.79	1886	46,804.83
1871	14,801.87	1888	33,213.54
1872	13,009.58	1889	11,898.09
1873	18,861.50	1890-91	17,500.32
1874	14,413.61	1892-93	14,961.09
1875	5,067.93	1893-94	7,677.60
1877	3,940.82	1894-95	13,100.53
1878	1,154.70	1895-96	5,944.69

Total \$361,263.28

The figures for 1861 through 1880 were obtained from Statement of Appropriations and Expenditures for Public Buildings, Rivers and Harbors, Forts, Arsenal, Armories, and Other Public Works, from March 4, 1789, to June 30, 1882, p. 306, 307 (47 Congress, 1 session, Senate Executive Documents, no. 196 -- serial 1992). The figures for 1882 through 1896 were obtained from the reports of the state auditor, in Minnesota, Executive Documents, 1882, vol. 1, p. 320; 1883-84, vol. 4, p. 25, 42; 1886-87, vol. 3, p. 643; 1888-89, vol. 1, p. 389; 1890, vol. 1, p. 305; 1892, vol. 1, p. 85; 1894, vol. 1, p. 200; 1896, vol. 1, p. 362, 377. The sum reported by the state

The first use of the five per cent fund was made in 1863, when the legislature distributed the proceeds among the counties in amounts proportional to the taxes assessed in 1861. On that basis Ramsey County received the lion's share -- a little more than \$600 -- while Jackson County, on the remote frontier, got the least -- \$1.70. Eight counties received more than \$200, and seven, including Jackson, received less than \$5.00 each. ³² In the years that followed, the legislature made a practice of making appropriations for specific roads and bridges, rather than distributing the funds on a pro rata basis. During years when the proceeds were great, much more could be done to aid the construction of roads and bridges than during lean years. Whenever there was money in the fund to be appropriated, there was a race to see which portion

auditor for 1882 does not agree with the total reported by the United States secretary of the treasury for that year because of the differences in the fiscal years of the state and national governments. The total sums from 1861 to 1880 as reported by the two officers, however, do agree, and the figure reported by the secretary of the treasury for 1880 is the same as that reported by the state auditor as having been received. In the report of the state auditor for 1885 and 1886 a clerical error evidently was made, for the years are indicated as 1883 and 1884. According to the state auditor's report for 1881-82, the state received \$31,623.04 from the federal government as a five per cent payment from the sales of Indian lands under the claim prosecuted for the state by General Sanborn. This money, however, was placed in the general revenue fund of the state instead of being added to the internal improvement fund. Report of the state auditor, in Minnesota, Executive Documents, 1882, vol. 1, p. 320, 331.

32. General Laws, 1863, p. 92-95; report of the state auditor, in Minnesota, Executive Documents, 1863, p. 442.

of the state could obtain the largest share. In a sense, the internal improvement fund developed into a "pork barrel" from which ambitious politicians could draw to obtain the political support of their constituents, and the rural statesman who could "point with pride" to the great number of bridges which he had made it possible for his supporters to build with state aid had a much better chance of gaining the favor of the populace than had the one whose rivals "viewed with alarm" the meager aid that the state was giving the district. ³³

An informal understanding appears to have existed whereby the appropriations from the internal improvement fund should not exceed one-half the cost of the proposed bridge or road. ³⁴ One purpose that such a scheme served

33. The comment of one Minnesota political observer illustrates the uncertainty of an annual income from this source: "Those who are expecting Bridge appropriations are likely to have their hopes disappointed, as the appropriations of last year cover all that is in the fund to date." Alexandria Post, January 21, 1876. In 1893 the fund was again low, and on April 26 the editor of the Freeborn County Standard remarked that "neither Freeborn nor any other county will receive any [funds] through the legislature." The same year Robert C. Dunn, representing Mille Lacs County in the legislature, wrote home to his constituents that it was doubtful that the seven thousand dollars which they sought for a road from Milaca to Mille Lacs could be obtained, "but if there is any money appropriated for roads and bridges Mille Lacs county will have its share." Princeton Union, February 16, 1893.

34. A typical illustration of the distribution of the cost of building bridges between the state and the counties is that of a bridge in Bergen Township in McLeod County, for which the state appropriated three hundred dollars, or one-fourth of the total cost of twelve hundred dollars. Hutchinson Leader, May 7, 1897.

was that it prevented communities from drawing indiscriminately upon the funds. It insured that each road or bridge built was actually needed, for a community would think twice before it would tax itself needlessly. In particular, the internal improvement fund was a blessing to the newer counties. They were confronted with the problems of constructing roads and bridges during times when their financial resources were inadequate for the task, and state aid, though often small, meant the difference between building roads and bridges and not building them. The fund, however, was not used entirely for the frontier counties. Every county shared to some extent in its benefits, though the share of the older counties was less than that of the frontier counties, considering the population and the value of the taxable property. In 1881, for example, the legislature distributed a little less than \$21,000 for roads and bridges. Of the fifty-five acts providing for this distribution, about twenty-five appropriated funds for work in the older counties, while the remainder applied to frontier areas and those in the earliest stages of post-frontier development. In 1885 the legislature in eighty specific grants apportioned more than \$80,000 for roads and bridges for the next biennium. Thirty-one of them, totaling a little less than \$15,000, were for work in the counties which had passed the frontier stage before statehood was achieved. The largest share went to the

newer districts, although many of the western counties were no longer helpless frontier communities. The simple justice of this form of distribution was recognized by most persons, for the five per cent fund came from the sale of lands in those counties which likewise contributed the greater share of the lands selected for railroads, swamp lands, and other special grants. The editor of the St. Paul Dispatch in 1870, when a bill had been introduced into the legislature to appropriate five thousand dollars for building a bridge across the Minnesota River at Redwood Falls, remarked, "Many of the older counties desiring the benefit of the Internal Improvement fund contribute no land and none as much as Redwood."

The application of the proceeds of the internal improvement fund to the construction of roads and bridges was not unaccompanied by protests. As early as 1874 the state auditor advocated that "as soon as practicable this fund should be devoted to some object that will generally benefit the whole State." In 1880 he reiterated his belief that "the circumstances justifying this distribution . . . no longer exist, and the fund should be devoted to some general purpose." The rapid disappearance of public lands within the state for some time had been a cause for concern on the part of those who wished to

35. Reports of the state auditor, in Minnesota, Executive Documents, 1881, p. 439-444, 1886, p. 872-885; St. Paul Daily Dispatch, February 19, 1870.

perpetuate the fund. In the seventies it was affirmed that the internal improvement fund "will never amount to very much more, though formerly large sums were annually received." ³⁶ This pessimism was not justified, however, for it was during the eighties and nineties that the fund received its largest annual increments. In fact during the first score of years that the payments were made the United States paid the state less than \$100,000; during the sixteen years from 1881 to 1896 the payments from the United States government reached the total of almost \$265,000. By the middle of the nineties, however, it was becoming evident that the public lands remaining in Minnesota soon would be sold. But, though the income from the internal improvement fund might end, it had made an indelible mark on Minnesota. Tangibly, it had enabled the people of the state to build many of the badly needed roads and bridges. Its intangible contribution was no less important. For forty years Minnesota's citizens had been accustomed to the existence of a fund upon which they might draw when they were faced with the necessity for building the avenues of communication. It was that habit of expecting aid which helped the apostles of the good roads movement to achieve one of their aims -- a state road and bridge fund. ³⁷

36. Reports of the state auditor, in Minnesota, Executive Documents, 1874, vol. 1, no. 3, p. 26; 1878, vol. 1, p. 276; 1880, vol. 1, p. 199.

37. Ante, p. 312n; post, p. 373-378.

In spite of the fact that considerable money and effort were expended upon the roads of Minnesota, the road system was bad. Its principal fault was to be found in the method of road making and road maintaining. Little attention was paid to the fact that the soil of the state varied widely in different localities. The black clay of southeastern Minnesota received the same treatment in the making of roads as did the black prairie soil of the Red River Valley, or the gumbo mud of the southwestern counties, or the sandy soil of central Minnesota. Along almost any road in the state the traveler was likely to encounter short spaces where the soil differed radically from that on the remainder of the road -- a road through a swamp was made of soil quite different from that on an adjoining highland, and a gravelly hillside varied greatly from either. Yet, rural Minnesota felt that it had achieved the maximum in road improvement after the stumps and boulders had been removed and the roads plowed. "In the matter of roads our people have displayed . . . energy and enterprise. They have graded hills, bridged streams and ditched swamps and marshes in order to make the roads more direct, until now well-graded thoroughfares run in every direction from the town," boasted one Minnesota resident.³⁸ But the practice of relocating the pioneer roads so that they

38. Letter from a Glenwood, Pope County, resident, in the St. Cloud Journal, September 12, 1867.

followed section lines involved engineering problems with which the later road makers were unable to cope. The pioneers who, in laying out their roads, followed the contours of the land and avoided swamps and precipitous slopes were infinitely wiser, though, perhaps, unwittingly so.

The country roads of Minnesota were under the care of elected officials, and in selecting these officials the voters of the rural districts did not use a criterion of scientific or technical qualification to perform a difficult and important piece of work. Instead, the road supervisors were chosen from among the voters themselves, and the basis for election was personal popularity, or the absurd but none the less often resorted to procedure of finding men who would do the work. They were small townsmen, small farmers, or farmers who had families of grown sons to care for the work of the farm, who seldom knew any other way of performing the work than the traditional way, and the only authority to superintend their work -- the town board -- was equally untrained and unqualified to perform a technical task. ³⁹

The road law of Minnesota prescribed that at least seventy-five per cent of the road work had to be performed before August 1 of every year. Custom decreed that it should be done during that in-between season in

39. Ante, p. 260-263.

late spring or early summer when it would least interfere with the work of the farmer. As a consequence, almost all the work was concentrated into a two or three weeks' period during the last part of May and the first of June. During that brief time an attempt was made to heal the scars left by traffic during the long months when the moisture from melting snows and spring rains had softened the surface. 40

Accordingly, when the corn had been planted, and the spring work of the farmers completed, the supervisor sent out his notices to the men of poll tax age -- that is, between twenty-one and fifty years -- to appear at a specified time and place with implements to work on the roads. 41

40. Ante, p. 262. References to working on roads indicate that the work was done almost invariably during the last part of May or in June. In 1872, for instance, Cummins worked on the roads on June 3 and 4, although he was also called to labor one day late in October. In 1873 he worked on June 9 and 13; in 1874 he worked only one day, June 23. In 1880 he worked two and a half days, from May 31 to June 2, and in 1881 the same amount of labor was exacted from June 6 to 8. See the Cummins Diary.

41. A sample of an "Overseer's Notification," printed on page 18 of Booth, Township Manual (Rochester, 1873), follows:

To Hiram Barnes:

You are hereby notified to appear on the 14th day of June, A.D. 1873, at (designate the place of labor) with a spade and pick (or state the implement needed) to work on highways.

And you are hereby required to furnish (at said time and place) a plow with a pair of horses (or whatever else is required) and a man to manage them. Dated this 11th day of June, A.D. 1873.

John R. Stevens,
Overseer of Road District No. 4.

The Supervisor has set the day --
 He did the same last year --
 To plow and scrape, and time to play
 At making roads, O dear!

And when the east wind calls for rain,
 The work-boss calls for us
 To stir the highway up again
 And make another muss. 42

On the appointed day, the men would appear with a miscellaneous collection of implements. Often their shovels were old and worn, their plows were aged relics which no longer could be used in the fields, and the wagons were the patched-up wrecks such as every farmer had in his barnyard. Nor were the workers a great deal more useful than their tools. One critic of the system commented:

As June approaches the . . . overseer goes around and warns out the people in his district to work. The next day, all the way from 7 to 10 o'clock, you will see all sizes and ages of people assemble. The preacher's son and school master bring along their weapons of slaughter. The Irishman brings his old ox Dime and the colt (a well matched team) but "jist the tame fer to work out the road tax." After a time the plow and scraper are started, begin to rend and tare [*sic*], fill up one mud hole by making another. . . . Care is taken that the ox and colt don't sweat. The sun is closely watched. The other people lean on their shovels while the old men tell stories. 43

This description of road working may be slightly exaggerated, but the time spent in working out the road tax does seem to have been made the occasion for farmers to gather with their neighbors and spend a day or two in

42. Farm, Stock and Home, 18: 264 (June 1, 1902).

43. Freeborn County Standard, May 11, 1892.

swapping stories, exchanging political views, and, in general, having a good time. "The road workers in charge of pathmaster Is[e]nour," stated a southern Minnesota newspaper, "were encouraged last week by a generous donation of a full keg of Yager & Eberlein's exhilerator, presented by Mr. Pooler." As often as not, the work was inadequately and listlessly done. ⁴⁴ "Uncle Charlie McEwen was in town yesterday and remarked that as usual the road workers have succeeded in making first rate water troughs and placing them right in the middle of the road." That was one man's opinion of the work that was done. ⁴⁵

In a farm magazine about 1900 a picture was published which bore the expressive title "Too Common 'Road Working.'" Of the eleven men and two teams pictured, only one man and one team are working, hauling a scraper full of dirt down the middle of the road. Three men are holding a conference in the road around a plow, and two other men near by are leaning indifferently on their shovels. Three tax payers are lolling in the shade of a tree, while two others watch the proceedings from their seats upon a rail fence. ⁴⁶ The fact that this picture was published during a period of intense agitation for better roads does not detract from its truthfulness. In

44. National Republican, June 19, 1884.

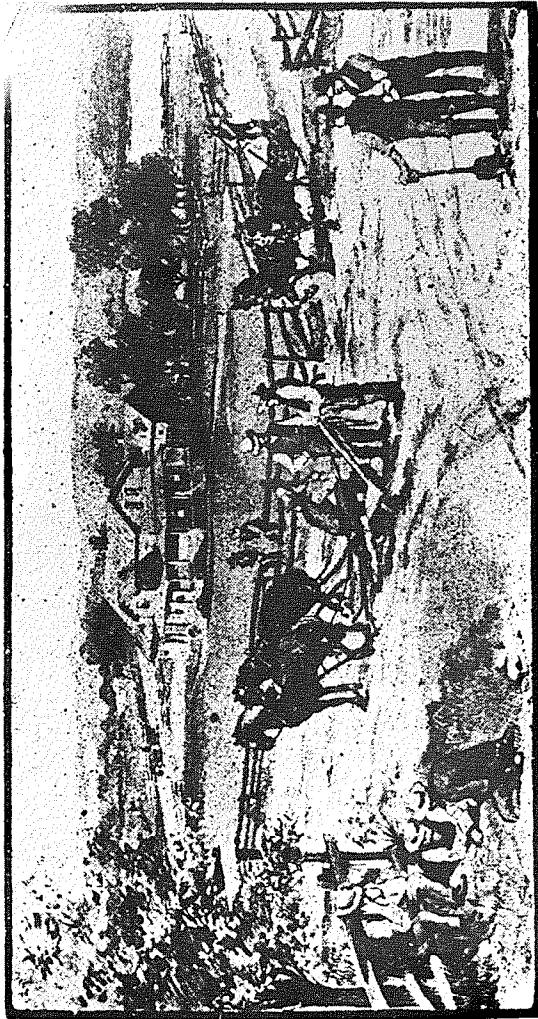
45. Hutchinson Leader, June 26, 1891.

46. Farm, Stock and Home, 17: 72 (January 15, 1901).

possesses a
 ed his excellencies he can go
 from home with his wagon and pick up in a
 neighboring district young sows that will
 develop into suitable mothers of pork pro-
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TOO COMMON "ROAD WORKING."

ings. We do this to a considerable
 our own farm, and if these have
 characteristics of color and form,

following are suggested:
 Do away with the office of pathmaster
 and substitute the road engineer
 general charge of all the
 of the county.

[From Farm, Stock and Home, 17: 72 (January 15, 1901).]

the seventies John Cummins, a reticent farmer who rarely confided his emotions to his diary, broke out with a condemnation of the labor tax system. "It is certainly discreditable to the people of this town," he stated, "that they are so slack in turning out to fix the road." Another entry records that he was "at work on the road to Minneapolis. There was not many out nor did they work very hard." The day following this last entry, however, he remarked that "today we did something better than yesterday." In general, he seemed to be disgusted with the working of the poll tax system, although his diary fails to record any method for improving it. ⁴⁷

In the spring of 1882 the editor of the Preston Republican, who likewise disapproved of the way in which the roads were maintained, expressed his disapproval in no uncertain words.

As a rule no money is expended by towns or counties, with so little value received as in the usual method of repairing highways.

As soon as the ground gets settled in the Spring, every one seems to forget the embargo under which they were laid for so many weeks. It is like the old negro whose cabin leaked so copiously, and on being asked why he did not repair it, replied that he couldn't because it rained. But why not when it don't rain? Because then, he replied, it don't need it! ⁴⁸

Most of the criticism of the roads came, naturally, when they were in the worst condition. Under the heading "Notice!" the Alexandria Post for May 20, 1881, called

47. Cummins Diary, June 3, 4, 1872, June 23, 1874.

48. Preston Republican, April 20, 1882.

attention to a bad road condition.

The town supervisors of the town of Alexandria are hereby notified that the public road, commonly known as the Crooked Lake road, from the point where it leaves the main road to the town line between the towns of Alexandria and Osakis, is in a dangerous and almost impassable condition. If repairs are not made on said road, damage is likely to result for which the town will be held liable.

The notice was signed by a resident of the community, and was printed in type large enough to catch the eye readily. "Somebody is responsible and censurable for the failure to keep this road in proper condition," another citizen declared in describing another road near Alexandria.⁴⁹ On the other hand, people were quite willing to give credit for good work done. The editor of the Rochester Post wrote in 1873:

From an intelligent and observing citizen, who has recently made the trip, we learn that the road leading west from the city, known as the Town Line Road, is in splendid condition all the way to Kasson. This route lays over some low, marshy lands, and through the enterprise, labor and good taste of residents on the road, it has been put in superb condition for travel. It is not only exceedingly pleasant to have a good road to travel on, but it is gratifying to note instances of proper improvements of the highways.⁵⁰

Lavish praise, however, was not given as frequently as damning criticism.

Although many people perceived the shortcomings of the road system, they were individuals battling against the inertia of custom and tradition. Their only claim

49. Alexandria Post, June 3, 1881.

50. Rochester Post, July 13, 1873.

to unity lay in their common recognition of the need for changing the methods of making and maintaining roads.

The editor of an Albert Lea newspaper heartily endorsed an editorial on this problem which was published in the Chicago Inter Ocean during the eighties. An unnamed Iowa newspaper editor had remarked that "a town in the west with good wagon roads extending thirty miles out from it in every direction would have a better trade and be richer than railroads could possibly make it." To this the Chicago paper replied:

Abating somewhat for overstatement, . . . the truth remains that the bulk of commerce of the interior towns is carried by farmers' wagons over country roads. So the question how to secure at least cost the best and most servicable wagon roads is a phase of the transportation problem that effects [sic] the larger number of people. While Congress is discussing the inter-state commerce measure town meetings and city councils would do well to apply their wits to the solution of the country-road question. ⁵¹

At least one Minnesota man had been considering this problem two or more years before this editorial appeared. In the village of Mapleton, a country town with a population of less than 450 people, Charles Brown, the proprietor of a general store, had established a newspaper which he published monthly and distributed free of charge. In the spring of 1885 he began to express his views regarding the not too happy road situation in Minnesota. He started a good roads movement all his own, and, although it was more than a decade before his ideas gained

51. Freeborn County Standard, February 9, 1887.

any great popularity, he succeeded in making his community, and wherever else in southern Minnesota his paper circulated, road conscious.

Brown's first broadside against the road system appeared in the issue of the Mapleton Enterprise for June, 1885.

We believe that the present system of collecting and working out the road tax is wrong in every particular. It is a relic of the past age and it is time it was abolished. We but repeat what is a well-known and conceded fact, when we say that men when working on the high way to work out their poll tax or property tax, will not work worth a continental, and the result is that very little is accomplished. We would abolish the poll tax entirely and levy a cash tax on all property sufficient to put the roads in each township in proper shape. We would have every road surveyed and a grade established. The contract of making the roads and keeping them in order we would let to the lowest bidder. Much might be said on this subject, but this brief hint may set some to studying the subject. 52

The editor of the Mankato Review caught up the subject, and in an editorial of his own summed up the objections to the poll tax system, which he declared was inequitably distributed since it fell more heavily upon property owners than others. The work on the roads, he went on, was ill-timed and suited only the convenience of the tax payers and the overseers. He advocated the contract system on the ground that the community would receive

52. Reprinted in the Mankato Review, June 9, 1885. A file of the Mapleton Enterprise from 1885 to 1891 is in the possession of the publisher of that paper at Mapleton.

"a full return for the money expended," and that repairs would be of an enduring character. "That our roads are not in better condition is due largely to the system, and if we would remedy the complaints that come to us from all parts of the county, and with it the constant demand upon the county road fund for repairs that properly pertain to the towns, we must first abolish the defective and unjust system of township road taxation, and substitute something radically different." He pointed out that most cities had long since abolished the poll tax system as being inequitable and unprofitable, and asserted that "many intelligent farmers in this county" favored the abolition of the system. 53

The response to these two editorials was not great in quantity, but it indicated that many thoughtful citizens were making a study of a system which had become thoroughly established in the life of the people. "I think much good has been derived by agitating the subject," a Blue Earth County farmer declared. He ventured to question Brown's unequivocal condemnation of the system, however, on the ground that "we have a good deal more road to build than you have in the village, and a great deal less tax to build it with. This is especially true of poll tax. . . . No one can deny that our present road system has been merely a failure. It is

now nearly thirty years since we commenced to work our roads and until quite recently, the best roads we have are those that have been worked the least." 54

Brown's good roads agitation was premature, for opinion had not yet crystallized sufficiently to unify those who offered positive criticism of the existing system. His editorials and the comments upon them, however, served to bring out the ideas of the more progressive farmers of his community. It is not to be doubted that many road overseers, who never before had thought of the necessity for providing adequate drainage for the roads under their care, surveyed them critically after reading the letters which Brown published on the subject. It is probable also that the thoughtful analysis of the road problem and the caustic criticisms of the work of the road overseers may have led them to exercise a little more care in working their roads, in a determination to disprove the charges. It cannot be said that the campaign of the Mapleton editor had any immediate or far-reaching effect upon the road system of Minnesota. Like many another prophet, he was ahead of his times. Whether he, or any member of the community reached by his paper, realized that Minnesota was on the threshold of a new era is to be doubted, but the fact remains that other

54. Reprinted, from the Mapleton Enterprise, in the Review, April 27, 1886.

influences were at work which made an improvement in the road system imperative and inevitable. Those influences were broader than the community, the county, or the state. They were national in their scope.

IX. THE CRUSADE FOR BETTER ROADS

During the closing decade of the nineteenth century and the opening years of the twentieth, a current of public opinion swept America into a renunciation of the roads with which nineteenth century Americans had been content. The agitation for better roads assumed the proportions and intensity of a crusade, and the leaders in the movement became apostles of the faith, preaching the gospel of good roads from one end of the land to the other. They had the satisfaction of seeing one state after the other cast off the outmoded system of road making and enter into a new era of improved highway construction, wherein the state actively engaged in road building. They saw the federal government again take up a share of the burden of making highways, and the creation of a bureau of the federal government to aid, encourage, and supervise their construction.

It was no coincidence that these same years witnessed the popularization of the bicycle and the automobile. These novel means of transportation were powerful factors in the growth of the good roads movement. And as the good roads idea grew and the bicycle and the automobile became practical realities, a new era dawned for the farmer. Good roads were responsible for the

initiation of free mail delivery to every farmer's doorway. Good roads brought the consolidated school, with its advantages in education, within the grasp of thousands of school children. Good roads made more profitable the neighborhood creamery, and made easier the marketing of farm produce. Good roads made as feasible for the farmer as for the city dweller the ownership and operation of automobiles. Good roads and the new methods of transportation cut distances in half, and, with the telephone, took from the farm the stigma of loneliness which had done so much to make farm life unattractive.

Although it was the farmers who benefitted most from good roads, it was not the agricultural population that took the initiative in the movement to obtain them. That distinction belongs to the young men who rode the crazy, two-wheeled contraptions called "bicycles." Apparently the first bicycles appeared in this country a few years after the close of the Civil War, when the Lallemond velocipede was introduced from France. A slight bicycling craze developed in America at that time, but it died out within a year or two. For a decade bicycles were a rarity, and only "an occasional boy was to be seen trying out his father's old 'boneshaker.'" During that ten years' interval, the "boneshaker" was considerably modified. Steel and iron had been substituted for wood, the front wheel had grown larger, and the "spider" wheel rimmed with a band of India rubber had

replaced the cumbersome wooden wheel of the earlier model. When the bicycle was next brought to public attention in America, it was a graceful, almost flimsy affair, the weight of which had shrunk from sixty pounds or more to about twenty. A few English-made bicycles probably were imported in 1876 and 1877, and in 1878 the Pope Manufacturing Company of Hartford, Connecticut, began to manufacture the "Columbia" bicycle along the lines of the most improved English models. Like wildfire the bicycling craze swept the nation in spite of the high cost of the machines -- the prices ranged from a hundred to a hundred and fifty dollars. In 1881 the Pope Manufacturing Company sold seven thousand bicycles. During the course of the next ten years other firms entered the field, and hundreds of thousands of the high-wheeled affairs were sold. In the eighties the "safety" bicycle, driven by a chain geared to the rear wheel, which was approximately the same size as the front one, was placed on the market, and, with the adoption of the pneumatic tire at the end of the decade, the new model gradually replaced the high-wheeled Columbia in public favor. In 1896 there were about four million bicycle riders in the United States and the 250 manufacturers of bicycles in the country were producing six hundred thousand machines each year. ¹

1. Carl W. Mitman, "An Outline Development of Highway Travel, Especially in America," in Smithsonian Institution, Reports, 1934, p. 336-339 (Washington, 1935); Goodhue County Republican (Red Wing), March 4, 18, April

It was natural that the devotees of the new sport should get together to share their enjoyment, and on September 11, 1879, a number of bicyclists met in Boston to hold a field day. Another gathering of the group was held in Boston in May of the following year. This meeting of the bicycle clan was notable because it was the occasion for the organization of the League of American Wheelmen, which welded the bicycle riders of America into one group. There were several unifying influences which brought the wheelmen together. The bicycle was a new vehicle upon the streets of American towns and cities, and American laws were not yet adapted to including them in the regulation of traffic and to extending to them the rights accorded the more familiar horse and buggy, the street car, and the steam railroad. Consequently, cyclists were discriminated against on city streets, and on country roads they apparently had no recognized rights. Teamsters were accused not only of refusing to give them a share of the road, but in some instances of attempting to run them down. Many cities passed ordinances forbidding them the use of parkways. In part this attitude toward the bicycle was the result of the newness of the machine, and in part the result of resentment of those who could not afford them against

1, July 1, 1869; "The League Meet at Chicago," in the Wheelman, 1: 115 (November, 1882); Saturday Evening Spectator (Minneapolis), July 8, 1882; St. Cloud Journal-Press, August 24, 1884.

this toy of the idle rich. The antagonism had an economic background, for operators of livery stables and taxicab fleets formerly had reaped a respectable harvest from carrying the people from place to place who now rode about on their bicycles. Such resentment sometimes was carried to the point of malicious interference with the operators of bicycles, and it was an aim of the League of American Wheelmen to protect its members from persecution by assisting them in a legal way when they became involved in court actions. The organization also sought to obtain the passage of laws which would protect the cyclists in their use of the public roads and streets. ²

The wheelmen had another motive for organization. This was the desire to improve city streets and country roads in order that they might better enjoy their sport. The bicyclists found that their new vehicle greatly increased the radius of their activities. They found that, without becoming unduly fatigued, they could cover five or more times the distance that they could walk. Indeed, the "century run," or a journey of a hundred miles, within the space of a day was not impossible if road and weather conditions permitted. The fullest enjoyment of this form of recreation, however, demanded ideal road

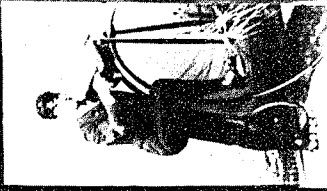
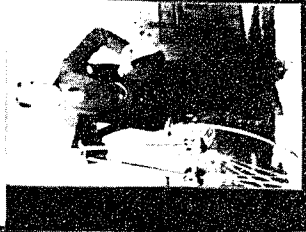
2. "The League Meet at Chicago," in the Wheelman, 1: 115; Saturday Evening Spectator, July 8, 1882; Fred. Jenkins, "A Word for the League," in the Minnesota Wheelman, 1: 4 (September, 1885); "Rights of Wheelmen," in the Minnesota Wheelman, 1: 8.

conditions, and American cyclists became first disgusted with the existing roads and then militantly organized to bring about an improvement in them. "Bicycle riders," declared one of them, "are each personally much interested in the subject of good roads and pavements," and good roads was a subject which the organization stressed for the next score of years. In furtherance of this and the other aims of the organization, the league established as early as 1882 a monthly magazine, the Wheelman, which it distributed to its members. ³

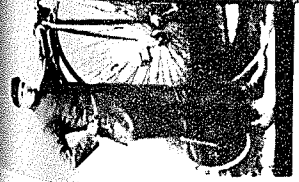
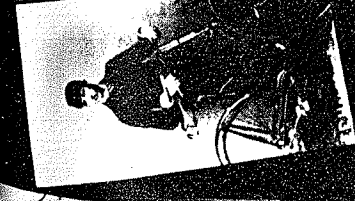
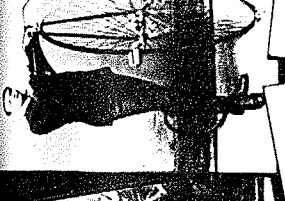
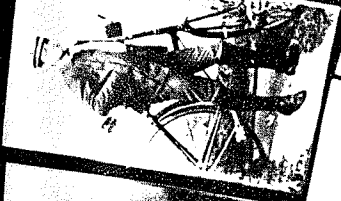
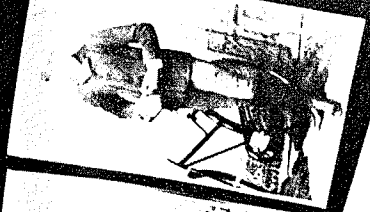
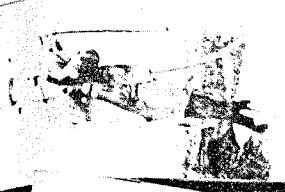
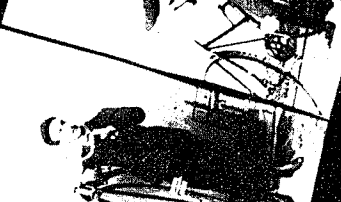
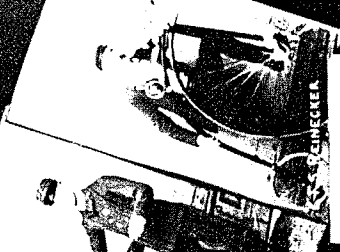
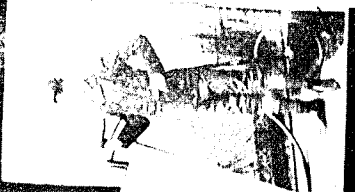
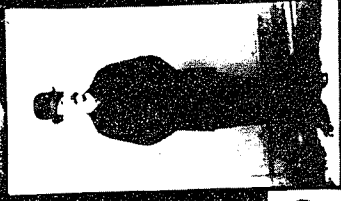
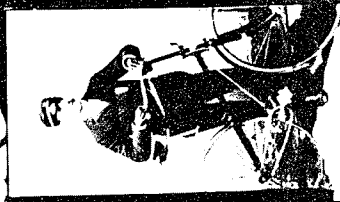
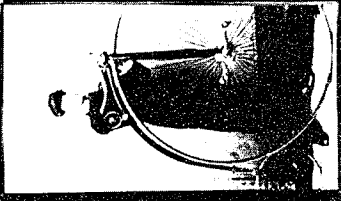
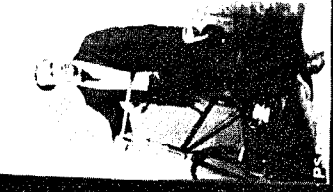
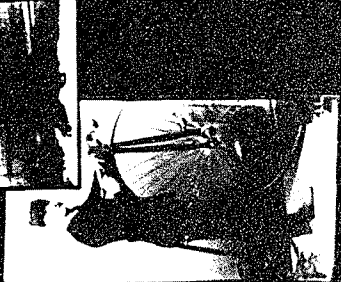
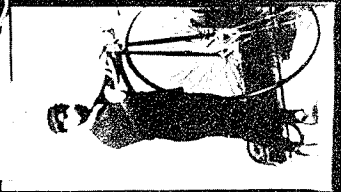
The League of American Wheelmen was a national organization. Subsidiary groups of wheelmen were formed in the states, each of which was organized as a free-acting agent in affairs which concerned its locality, but which was represented on the board of directors of the national group. Minnesota wheelmen were interested in the organization early in its history, and a Minnesota division was formed not later than 1881, within two years of the first appearance of the "iron ponies" in the state. In 1880 cycling was such a novelty that the management of the Fillmore County fair arranged for an exhibition by two riders. In 1883 the wheelmen of Minnesota held their first annual meeting, and in 1885 the organization in the state had a membership of more

3. L. J. Bates, "Effect of the Bicycle upon Our Highway Laws," in the Wheelman, 1: 126-129 (November, 1882); Joseph B. Bishop, "Social and Economic Influence of the Bicycle," in the Forum, 21: 680 (August, 1896).

THE CYCLE CLUB OF ST. PAUL IN 1889
[From a photograph in the possession of
the Minnesota Historical Society.]



THE
CYCLE
CLUB



than 350, representing forty-four towns or cities, and was planning state-wide tours to build up its membership. It continued to grow until in the nineties several hundred bicyclists were listed on its rolls. It was characteristic of the times and the sport that the members of the Minnesota division of the league were not mere boys or youths, but it included some of the most prominent of the business and professional men in the state -- men whose voices and votes counted in any gathering. ⁴

The League of American Wheelmen had decided early in its existence what the outstanding ills of the road system in America were. "In order to secure good roads in the country," a writer for the Wheelman stated in 1882, "it is chiefly necessary merely to so change the highway laws as to require all highway taxes to be paid in money, when the well-known shrewdness and closeness of the farmers in dealing with public moneys will induce them to watch closely after their interests, and see

4. Charles E. Pratt, "What of the League?" in the Wheelman, 1: 134 (November, 1882); Minnesota Wheelman, 1: 3, 9, 13 (September, 1885). The Minneapolis Cycling Club, claiming affiliation with the League of American Wheelmen, was organized at least as early as May, 1881. It consisted of twelve members. Saturday Evening Spectator, May 14, 1881, May 20, July 8, 1882. The Preston Republican for June 24, 1880, announced that "a new feature" of the fair for that year would be a bicycle race between two young men from Lanesboro. The same paper for April 28, 1881, stated that these young men had had their bicycles "for over a year," indicating that they probably had been purchased in 1879. As far as is known, these were the first bicycles in Minnesota.

that they get the worth of their money in good roads."

As to the part the cycling enthusiasts were to play in obtaining better roads, the writer declared that bicycle riders "demand and will have, just as soon as they increase sufficiently to make their numbers felt in public affairs, the best roads in the country, and the best pavements in cities. . . . Bicyclers demand, and will have, as soon as they obtain power, smooth roads, hard and durable roads, and roads kept at all times clean and in thorough repair." Their influence would be "in favor of . . . such legislation as will secure the best [roads]; therefore, it will be an influence for the public good." 5

The constructive manner in which the League of American Wheelmen criticized the road systems of the states made that body a center about which all the other discontented elements -- and they were many -- could gather. Its vigorous stand encouraged other groups similarly to state their minds. In 1883, for example, the farmers of Iowa met in a convention to protest against the mud that threatened to engulf them. The campaign of Brown of the Mapleton Enterprise in 1885 already has been mentioned. Nothing came of these early protests, but by the end of the eighties the movement for good roads was well under way. In 1887 a New Jersey convention, sponsored by the state department of agriculture, formulated

5. Bates, in the Wheelman, 1: 126, 127, 129.

a plan for improving roads. The plan was placed before the legislature the following year, but it was not until 1891 that it was adopted. The New Jersey law provided for the abolition of the small road districts and the office of road overseer, and the delegation of the care of public roads to the township. The state was to assume one-third of the cost of building roads, one-tenth was to be charged to property owners, and the balance was to be assumed by the county. This law was the first of the modern state aid road laws, the first instance of a state definitely entering the business of building roads.⁶

In 1889 Dr. Jeremiah W. Jenks, a professor of political science and English literature at Knox College, Galesburg, Illinois, presented to the American Economic Association a study of the road problem. In it he summarized the benefits to be gained from good roads, compared the roads in America with those in other nations, and made suggestions which, he felt, would lead to an improvement of traveling conditions. He condemned the labor tax system as wasteful of labor and "hardly defensible on grounds of expediency," recommending the levying of a money tax in its stead. The collection of a

6. Ante, p. 325-328; Brindley, Road Legislation in Iowa, 184-192; Edward Burrough, State Aid to Road-Building in New Jersey (United States Department of Agriculture, Office of Road Inquiry, Bulletins, no. 9 -- Washington, 1894); C. Paul Jones, "Good Roads," in Society of Engineers in the University of Minnesota, Year Book, 1894-95, p. 33 (Minneapolis, 1895); Daily Pioneer Press, March 3, 1883.

money tax and its expenditure upon the roads, however, would not be an improvement over the existing system unless there was "efficient road supervision" by "a paid official who was expected to earn his salary," he said. The services of trained engineers in laying out roads, he advised, were essential to determine grades and to insure an efficient expenditure of public money. These trained engineers, he maintained, should be under the supervision of a "state board of engineers." He recommended the classification of roads into three divisions: state roads to be laid out, built, and maintained by the state; district roads to be laid out, built, and maintained by the counties; town roads similar to the general plan in force, to be built and maintained by the townships. Jenks's analysis of the road problem probably did not excite popular enthusiasm, but it undoubtedly reached the influential citizens of the nation. Its effect upon the future development of road legislation is attested by the fact that the schemes for obtaining good roads adopted by most of the states were based upon the plan he suggested. ⁷

In the spring of 1891 a state-wide meeting was held in New York at which was organized the Association for the Improvement of the Highways of New York. During

7. Jeremiah W. Jenks, Road Legislation for the American State, 34, 66, 68-72 (American Economic Association, Publications, vol. 4, no. 3 -- Baltimore, 1889).

1892 state conventions were held in Iowa and Missouri, and in the fall of that year delegates from a large number of states met in Chicago to form the National League for Good Roads. The purpose of the national organization was to "awaken public interest and to suggest a line of action that will later crystallize into concerted and systematic effort and a general remodeling of our whole network of highways." It wholeheartedly supported the good roads bill drawn up by Roy Stone of New York, which had been introduced in Congress during July, 1892. The bill, which became a law in March, 1893, provided for the creation of the office of road inquiry in the department of agriculture. The office was to study American methods of road making and prepare for publication articles dealing with the subject, and to aid in disseminating knowledge of the best methods of road making through the land-grant agricultural colleges and the agricultural experiment stations scattered throughout the country. An appropriation of ten thousand dollars was made to finance the work the first year, and a like amount was made available during each of the following two years. In 1896 the appropriation was reduced to eight thousand dollars, and that standard prevailed until the end of the decade. Stone, who had pushed the bill so vigorously, was placed in charge of the office, but in 1898 Martin Dodge, who had been the guiding spirit of the Ohio good roads movement, succeeded him. The office had a modest beginning

but it was directed by men of singular ability, who prepared the way for its expansion into a powerful agent for the furtherance of the good roads movement. ⁸

In Minnesota the movement for better roads developed but little more slowly than in the nation at large, for the same influences were at work. The meetings of good roads enthusiasts in other states during the latter part of 1891 and in 1892 received more than ordinary attention, and articles dealing with road problems published in other states were republished in Minnesota newspapers. Manufacturers of road-making equipment, who had placed on the market new and improved models of scrapers, drags, and graders, sent their sales forces into the rural districts to stir up interest in the good roads movement among the farmers. Manufacturers of bicycles took a leading part in the agitation. One eastern firm offered a hundred bicycles as prizes for the best one hundred essays on the subject of roads and road making, and in Minnesota the Harry Svensgaard Bicycle Company of Fergus Falls offered prizes for the best descriptions of good and bad roads in Minnesota outside the cities. ⁹

8. Northwestern Agriculturist, 6: 78 (April, 1891); Engineering News, 28: 35, 585 (August 25, December 22, 1892); Statutes at Large, 27: 737, 28: 266, 729, 29: 104, 30: 7, 336, 954; Roy Stone, compiler, State Laws Relating to the Management of Roads, Enacted in 1888-'93, 5 (United States Department of Agriculture, Office of Road Inquiry, Bulletins, no. 1 -- Washington, 1894); Daily Pioneer Press, November 13, 1892.

9. Hutchinson Leader, April 15, 1892; Freeborn County Standard, April 27, May 4, 1892; Minneapolis Evening

During the fall of 1891 the first organized attempt was made to do something about the roads of Minnesota. Early in November E. L. Grout, a pioneer of Rock County and a political leader of some force, wrote to the editor of the Rock County Herald of Luverne suggesting that a meeting of the road supervisors of the county be called to consider "plans for adopting the new methods [of making roads] and making arrangements whereby the work of each township can be done systematically and with the greatest economy." The editor of the paper endorsed the idea as "one of the most important matters brought before the people of this county for many a day." ¹⁰ A road convention, consequently, was held at Luverne on January 22 and 23, 1892. The four points of the program show what these southwestern Minnesota farmers considered to be the weak spots of the road system.

1st. -- As the law now stands can township authorities arrange to reduce the road taxes 50 per cent. and have them paid in money?

2nd. -- If the tax should be paid in cash could it be efficiently expended under the present over-

Tribune, April 30, 1892. The latter paper devoted one column at fairly regular intervals to the publication of letters from readers dealing with pertinent topics. It is significant that in practically every issue for a period of several months during the spring of 1892, at least one letter relating to the problem of road improvement was published.

10. Rock County Weekly Herald, November 6, December 25, 1891. An illustration of the promotion campaigns of the road machinery companies may be found in the Northwestern Agriculturist, 6: 126, 7: 112 (June, 1891, May, 1892), where pictures and descriptions of new road-grading machinery are shown.

seer system? If not, what modifications of the plan would be necessary?

3rd. -- If the manufacturers of road graders make terms that meet our views, will it be expedient to recommend our several townships to purchase one or more?

4th. -- What arrangements are requisite in order that needy road districts can have a more equitable share of the tax expended in the their [sic] localities? 11

It was the consensus of opinion of the "farmers and others" who attended the convention that under existing laws the township had no power to reduce taxes and collect them in cash. "It will be necessary to have an act of the legislature to do so, and we recommend that an act of the legislature be asked for to enable town boards to make the desired changes." When the question of purchasing road graders came up, the convention decided that where terms were favorable, road graders ought to be bought. Representatives of two manufacturers of road graders, who were at the meeting, promptly took up the challenge by offering liberal terms to town authorities. No immediate solution was suggested for the problem of providing aid for needy road districts, but it was decided that the question of co-operation between road districts was one of vital importance and should have united thought and action. "As a rope is no stronger than its weakest point, so a main thoroughfare should be considered no better than the worst place in it, and the district which has good roads should not

consider its road work completed until the roads in other districts are in equally as good condition." 12

The two-day conference opened the Minnesota phase of the good roads movement. It hesitantly approached the questions which were disturbing the people of the state, but the discussions centered around points which were germane to the good roads movement generally. The abolition of the poll tax and the substitution of a cash tax in its place were cardinal points in all phases of the crusade for better roads. The failure of a resolutions committee to condemn the small road districts might have indicated that the convention failed to recognize a genuine problem which had to be solved before the good roads ideal could be attained. The small road district and the old-fashioned road overseer were barriers to the employment of skilled civil engineers, who alone could make sure that roads were properly laid out, properly built, and properly maintained. The farmers in attendance, however, refused to accept the recommendation of the committee that efficient expenditures of public money could best be assured through careful selection of road overseers, and, although nothing was offered in its stead, the refusal to commend the existing system indicated that the good roads leaven was working. Finally, the significance of the attendance of road

12. Rock County Weekly Herald, January 29, 1892.

machinery men should not be overlooked. Hand in hand with the good roads movement went improved methods and improved machinery. They were essential parts of the movement, for without them the economy and improved road conditions, for which the good roads movement stood, could not have been attained. There was no pretense about the motives of the salesmen in attending the meeting: they wanted to sell their machinery. One suspects that at least this phase of the good roads movement was not entirely uninspired, and credence is lent to the feeling that the road equipment manufacturers may have had a ubiquitous, if unseen, finger in the good roads pie from start to finish.

The meeting was not without good results. Led by Grout, the Rock County Farmers' Alliance endorsed the good roads idea, and appointed a committee of three of its members to see that public interest was kept alive by the publication of articles dealing with the good roads problem in the local newspapers. The endorsement of the good roads movement by this local Alliance group was followed by similar action by the state organization, which, at its state-wide convention in St. Paul on July 7, 1892, adopted a resolution to the effect that highway matters had not received the attention they deserved and demanding remedial legislation. An attempt was made by other interested citizens to keep the discussion on a non-political basis. "Let every citizen attend their

town meetings and talk about this matter and settle for themselves what they want," appealed one such earnest worker, and he concluded, "This is Republican and also Democratic." 13

In Mapleton, editor Brown of the Enterprise viewed this first Minnesota convention with a great deal of interest. He commented:

A public meeting was held in Luverne, this state, last Friday to discuss a subject that the Enterprise, a few years ago, alluded to frequently and succeeded in stirring up quite a lively interest on the subject. The meeting was to consider the practi[ca]bility of abolishing tetotally the present system of road making. . . . Small road districts with inexperienced path masters, forced to rely on the careless and indifferent poll tax workers, must very soon give way to a better plan. Some progress has already been made in the improved machinery lately introduced for road grading. The period of old-fashioned scrapers is about over. What now remains to be done is to abolish the poll tax, create a cash road fund and let the road making of the whole town by contract, to parties who will furnish the tools and machinery, and work to a plan laid down by a competent high way engineer. 14

The good roads movement in Blue Earth County got under way again with the publication of Brown's comment. During the rest of the winter and the spring of 1892, letters dealing with the road problem from farmers, politicians, and businessmen of southern Minnesota were

13. Rock County Weekly Herald, February 19, March 4, 18, April 15, 1892; St. Paul Daily Globe, July 8, 1892. The fifteenth plank of the Farmers' Alliance platform demanded the immediate revision of the road laws of Minnesota and the appropriation of one-half the income from the sale of liquor licenses and from a state tax on inheritances for a state fund for public roads.

14. Mapleton Enterprise, January 29, 1892.

published in almost every issue of the Mapleton Enterprise. All agreed upon the aim of the movement -- better roads; there was less agreement upon the methods by which the aim could be brought about. One writer believed that by providing adequate drainage better roads would materialize. Another suggested that the roads of the county should be macadamized. A road contractor thought that he could build adequate roads and keep them in repair with the money which in any road district was ordinarily paid in commutation for the road tax. A fourth commentator attributed all the evils that beset travelers over Minnesota's roads to the narrow tires that farmers used on their wagons, and believed that the compulsory use of wagons with tires three inches or more in width would alleviate the condition. The newspaper discussion of the road problem betrayed a more than ordinary interest in a subject of more than ordinary importance. The editor of the Mapleton Enterprise felt that the interest was widespread enough to justify him in calling a convention of Blue Earth County citizens that fall to consider what means should be taken locally to insure good roads. 15

On November 22 a good roads convention assembled at Mapleton. Brown was elected chairman of the assembly,

15. Mapleton Enterprise, February 19, March 4, 18, April 8, 15, 22, 29, May 13, 20, 27, June 3, 17, October 28, 1892; Rock County Weekly Herald, April 15, 1892.

and his partner in the journalistic field, H. C. Hotaling, was chosen secretary. Despite an expression of satisfaction with the existing road system by some of the delegates, the convention went on record as condemning the timeworn methods in use. Resolutions were adopted recommending the employment of competent civil engineers in each county of the state to see that roads were properly laid out and maintained; the abolition of the labor tax and the collection of all taxes in money; the adoption of the contract system for the construction of roads according to the specifications of the civil engineer; the enlargement of road districts so that each township should constitute a district; the creation of a state road and bridge fund made up of the receipts from the internal improvement fund and a percentage of the tax on the gross earnings of the railroads; and finally the formation in each county of a good roads association, composed of one member from each township and the chairman of the board of county commissioners, whose duty it should be to gather information about road-making methods, report on the condition and needs of the roads in their districts, and make suggestions for improving them. As an afterthought, and to please those among them who were contented with existing conditions, the convention adopted another resolution to the effect that "this general law should not be operative in any township until voted upon

by the people of said township." 16

Brown was a little disappointed with the results of this assembly, chiefly because the other newspapers of the county ignored it. If the newspapers were indifferent, he could not complain that the politicians were, for among the persons present were at least one state representative and a state senator, as well as several candidates for office in the forthcoming election. Some of them made suggestions, but most of them were there as Senator George T. Barr of Mankato stated, "to secure the views" of their constituents "so as to be able to act intelligently in regard to any changes which should be made in the road law." Their presence was an encouraging indication of the seriousness with which the road problem was being viewed. 17

The Mapleton convention outlined an aim for good roads advocates, but it was merely the prelude to a greater meeting which even then was being planned. In September, 1892, a month before the announcement of the Mapleton convention appeared, the Minnesota division of the League of American Wheelmen met at Winona. At the business meeting of the league A. B. Choate, chief consul of the Minnesota wheelmen, called attention to the progress that had been made in road improvement in other states. When he suggested that Minnesota wheelmen should take the

16. Mapleton Enterprise, November 25, 1892.

17. Mapleton Enterprise, November 25, 1892.

initiative in beginning the work for good roads in the state, the convention enthusiastically adopted the idea and voted to appropriate a hundred dollars to help defray the expenses of a state-wide convention of all who were interested in good roads. The St. Paul Chamber of Commerce volunteered to play host to the gathering and appointed Christopher C. Andrews to co-operate with the committee that the Minnesota wheelmen had appointed. Letters of invitation to attend the proposed convention were sent to the county commissioners of Minnesota in October, each county being entitled to send two delegates for every senator and representative that it had in the legislature. The task of arousing interest in the convention was made easier by the widespread attention given to the meeting of the second assembly of the national league for good roads in Washington in mid-January. Minnesota, in common with the rest of the nation, was growing road-conscious. 18

The first state-wide good roads convention in Minnesota met in St. Paul on January 25, 1893. Newspaper accounts placed the number of delegates present at four

18. Winona Daily Republican, September 23, 1892; Daily Pioneer Press, November 13, December 14, 1892, January 7, 15, 18, 1893. Forum, a monthly magazine of national circulation, published three articles dealing with the road problem during a single year's period: Isaac B. Potter, "The Profit of Good Country Roads," 12: 376-386 (November, 1891); Albert A. Pope, "An Industrial Revolution by Good Roads," 13: 115-119 (March, 1892); James A. Beaver, "Why We Have So Few Good Roads," 13: 771-777 (August, 1892). Other national magazines published similar articles, and the agricultural magazines were actively pushing the good roads movement.

hundred or more, but the official report of the convention stated that there were three hundred and fifty-five, only fourteen counties failing to send delegates. They came from all parts of the state, and they represented all possible points of view on the question of roads. For the most part, they were chosen "carefully and judiciously," and, in view of the fact that in many cases they were required to pay their own expenses, it is obvious that they were deeply interested in better roads. ¹ The writer of an editorial in the issue of the St. Paul Pioneer Press which appeared on the morning that the convention opened commented on the pioneering work that confronted the convention in educating the people in the elementary principles of reform, and pointed out that one way to do that would be to show how much poor roads cost.

That is the fact that must be hammered into the mind of the farmers. If they can be made to see that they lose more money every year in the cost of hauling their crops from the farm to the nearest railway station than they ever have or can from excessive freight charges, they will begin to understand that road improvement is the first thing of all to which they must begin to devote themselves.

The second thing on which to lay stress is the description of a good road. . . . Most farmers, certainly not those who have been born in this country,

19. Daily Pioneer Press, January 25, 1893; Stillwater Daily Gazette, January 26, 1893; Detroit Record, January 27, 1893; Dodge County Record (Dodge Center), January 19, 1893; Great West (St. Paul), February 3, 1893. An unsuccessful attempt was made in the legislature in January, 1893, to get legislative sanction for the payment of the expenses of delegates to the convention by the counties. Senate Journal, 1893, p. 17; House Journal, 1893, p. 38.

never have seen a good road in their lives. . . .
What we must have is the macadam road. . . .

The next point, and by all odds the most difficult, is the question of ways and means. The state needs good roads and ought to have them. It will pay the people to provide them. But how shall we go about it? ²⁰

That, essentially, was the theme of the convention. When Henry R. Wells, an attorney from Preston who was elected chairman of the meeting, took the chair, he urged the convention not to "go too fast, ask too much, nor take the question of roadbuilding too far from the communities where these delegates belong." C. D. Gillan, a farmer from Redwood County, recognized the need for pioneer work in building up "the right sort of public sentiment." This need was emphasized in a still more forceful manner by Senator Jay La Due of Rock County, who urged that "we must arouse a feeling for better roads in our districts, and . . . our efforts should be at home first." The inspirational impetus for the meeting was furnished by W. W. Pendergast, a member of the faculty of the college of agriculture of the University of Minnesota, with a discussion of the need for a good roads movement.

A perfect highway is a thing of beauty and a joy forever. It blesses every home by which it passes. It brings into pleasant communion people who otherwise would have remained at a perpetual distance. It awakens emulation, cements friendships, and adds new charm to social life. It makes the region it traverses more attractive, the residences more delightful; it stimulates a spirit of general improve-

ment. Fields begin to look tidier, shabby fences disappear, gardens show fewer weeds, lawns are better kept, the houses seem cosier, trees are planted along its borders, birds fill the air with music, the world seems brighter, the atmosphere purer. The country is awake, patriotism revives, philanthropy blossoms as selfishness fades and slinks from view. The schoolhouse and the church feel the magic influence -- the wand of progress has touched even them; the old are young again, the young see something now to live for, and to all life seems worth the living. The daily mail reaches each home. The rural cosmopolitan "feels the daily pulse of the world." Wheelmen are no longer confined to the cities. Bicycles, now within the reach of all, are no strangers among farmers. The golden days of which the poets long have sung are upon us. The dreams of the past are coming true. Nothing can thwart the will of fate. Put your ear to the ground even now and you will hear the footfalls of the "good time coming." 21

After this emotional tuning up, the delegates were prepared to listen to the soberer and more humdrum aspects of good roads.

Since the program of the convention was built about the assumption that a large part of the work would have to be educational, many of the papers did not directly attack the problem of country roads in Minnesota, but were devoted to an effort to build up the stock of knowledge of the delegates. General Andrews, for example, read a paper describing the roads of Europe; George W. Sublette, assistant engineer for the city of Minneapolis, reviewed the essentials of pavements and roads in cities.

21. Proceedings of the Minnesota Good Roads Convention Held at St. Paul, Minn., January 25, 26, 1894 [1893], 5, 6, 7 (United States Department of Agriculture, Office of Road Inquiry, Bulletins, no. 2 -- Washington, 1894). Through an error, the date of the convention appears, throughout this publication, as 1894 instead of 1893.

and towns; John D. Estabrook, who for fourteen years had been superintendent of roadway construction in the city of Philadelphia, made some practical suggestions about the construction of dirt roads in Minnesota, and W. S. Chowen of Minneapolis gave a practical talk on the repair of such roads. 22

Choate, in a discussion of "Bad Roads -- Cause and Remedy," pointed out that "The root of the bad-roads evil in Minnesota is our lack of a practical, business-like system." He analyzed the weakness of the poll tax, by which "men who are incompetent and inexperienced are permitted to work out their road tax instead of paying it in money." He harshly criticized the extravagance of the small road districts in which "eleven thousand incompetent, inexperienced, petty road overseers have the supervision of the incompetent men who 'work the roads,' at an annual expense . . . of \$160,000 in cash." The financing of road improvements, he asserted, was difficult partly because the state constitution forbade the state to aid in improving the highways, and in the northern part of the state the financial problem was made still more perplexing by the presence of five hundred thousand acres of tax exempt railroad lands. To effect a cure for this situation, he suggested that railroad lands be placed on the tax rolls. The wagon roads of the state, he de-

22. Proceedings of the Minnesota Good Roads Convention, 8-13.

clared, should be classified, "according to importance, into State, county, and township roads," to supervise which he would "constitute State, county, and township highway commissions." The state highway commission would be authorized to "lay out and furnish plans and specifications for State roads, and require and enforce the building of the roads according to plans." Roads, he held, should be built "at a local expense and by a sort of partnership arrangement," and "the credit of State and nation should be used to obtain loans at a very low rate of interest." 23

The climax of the two-day convention came when E. J. Hodgson of St. Paul proposed a plan for a permanent good roads association. He asserted:

The very importance of this work admonishes us that we must not go at it in an impetuous, haphazard manner. The fullest investigation and deliberation are essential to its successful prosecution. For this purpose, and for the purpose of arousing public interest, a State organization will be necessary. The experience of others should be gathered and utilized to the fullest extent. We must not repeat the old acrobatic feat of jumping out of the frying pan into the fire. It should be taken up in a business way, or we had much better leave it as it is. 24

The aims of the convention were fulfilled in these speeches. A beginning was made of the problem of educating the people in the methods of making better roads. Spiritually, they were put in an exalted mood by the appeals to their emotions.

23. Proceedings of the Minnesota Good Roads Convention,

11. 24. Proceedings of the Minnesota Good Roads Convention,

They were presented with a program of work to be performed. Finally, they were shown what was to be done in order that the work which they had begun might be carried on.

It was apparent that most of the delegates were in favor of making drastic changes in the road code of Minnesota. The abolition of the poll labor tax and the levying instead of a cash tax, the employment of skilled road engineers, the use of modern equipment, the performance of the work under contract instead of by day labor, the payment of bonuses for the use of wide wagon tires instead of narrow tires, the repairing of the roads as often and as soon as they needed it, and the creation of a state fund to aid in road building -- these were the suggestions most frequently made. There was also some enthusiasm for building macadamized roads, and for the employment of convict labor on roads.

A number of suggestions were made to provide for the financing of road building. Besides a cash tax to be levied for a road and bridge fund, one popular idea was to levy a special tax upon the railroads and railroad lands for this purpose. Members of the Farmers' Alliance urged that the money received from licensing liquor establishments should be used for highway purposes. One delegate from a northwestern county suggested that the county commissioners be given sole power to sell liquor, and that the funds from this source be used for county

roads and bridges. In his county, he claimed, the money not only would be sufficient to pay for building roads, but to finance the construction of drainage ditches as well. One large group in the convention favored the issuance of long-term bonds to pay for building roads. It was their claim that one generation should not be compelled to pay for roads which would be of equal benefit to coming generations. Diametrically opposed to this view was that of the Farmers' Alliance group. They feared that the issuance of bonds would place an increasing indebtedness on the farmers who, because they owned the land, would have to assume the greater portion of the burden of paying the bonds. It was a thesis of the Farmers' Alliance movement that the farmers were exploited by the wealthy industrialists, and the proposition of bonding, they held, was simply another method by which the exploitation would be carried on. Even before the state-wide convention was held, the editor of the Great West, the official Farmers' Alliance organ in Minnesota, warned his readers to "Look out -- it is a 'bond scheme' -- to give the rich a chance to put their wealth into your debts -- instead of using their money." A short time later he declared that "the farmers and laborers of this state . . . are too well posted and intelligent as a class not to see through the bond issuance scheme -- that it has behind it something of more importance to the originators than the 'proposed' good

to the farmers." One after another, the local Alliances of the state met to discuss the problem, and, as often, they returned a resolution opposing the long-term bond plan. The organization as a whole felt that the cost of improving roads "should be borne by all classes, inasmuch as the business men in our towns and cities will receive as much benefit therefrom as the farmers." 25

The first good roads convention did not bring about the immediate fulfillment of the ideal of good roads. Rather, its success lay in the formation of a permanent organization to carry on the work of teaching the people the value of good roads. This campaign of education, however, could not be prosecuted over a period of years without some sort of permanent organization to preserve the vital spark which, uncherished, would soon die. That was the function of the Minnesota State Good Roads Association, which was organized on a permanent basis in the closing moments of the convention. There was some opposition to such an organization, Fred Iltis, one of the delegates from Carver County, questioning the wisdom of a permanent organization on the grounds that it was likely to degenerate into a semipolitical body. 26

When the permanent organization was effected, a committee of five members, headed by Choate, who had been

25. Daily Pioneer Press, January 25, 1893; Great West, December 2, 1892, January 20, 27, February 3, 10, 17, 24, March 3, April 14, 1893; Mapleton Enterprise, January 6, 1893.

26. Proceedings of the Minnesota Good Roads Convention, 16; Daily Pioneer Press, January 27, 1893.

elected president of the association, was selected to outline a program of legislation. But a movement was already under way in the legislature to enact good roads legislation. On January 10 Joseph Underleak, representing Fillmore County in the House, had introduced a bill which embodied many of the recommendations made two weeks later by the convention. It provided that townships might, when a majority of the voters signified their desire to do so, abolish the labor tax and substitute instead a cash tax, and that the supervision of road construction and maintenance be placed in the hands of the township supervisors who were to employ a competent road overseer. Critics of the bill found one serious defect in it, for, once the township had voted to abolish the poll tax and substitute the cash tax, they were prohibited from returning to the poll tax method of financing road work. Some of the legislators, like Robert C. Dunn of Princeton, the author a score of years later of a famous road bill, felt that the farmers had too heavy a drain upon their cash resources as things stood, and believed that most of them would prefer to continue to pay their road tax in labor. In the Senate the bill encountered more opposition. The committee on roads and bridges recommended that it be passed, although some of the members of the committee, notably Edwin E. Lommen of Crookston, felt that the measure was inspired by the manufacturers of road-making equipment. Thus, to the fear that farmers

would not, or could not, pay the added burden of a cash tax for roads was added the accusation that manufacturing interests stood to profit by the passage of the measure. Probably many of the senators said with Dunn, "I don't like the bill." At any rate, it never was brought up for a vote in the Senate. ²⁷

The good roads cause gained many influential friends during the following year. One of them was Michael J. Dowling, the editor of the Renville Star Farmer, who in his youth had suffered the loss, as the result of freezing, of his legs and one arm and part of the other hand. In spite of terrific physical handicaps, Dowling had risen to occupy a position of political importance in the state as a leader in the Republican party. While he was mildly interested in the good roads movement from its inception, an unfortunate occurrence during the summer of 1893 converted him into an ardent advocate of change in the road system. A bungling or maliciously mischievous road supervisor made Dowling the butt of a joke by serving written notice on him to appear in person to work out his road tax on the streets of the village. "What fine roads we will have," Dowling scolded, "if men without legs or hands are to do the shoveling. Ye Gods, what thrift!" Thereafter his newspaper advo-

27. House Journal, 1893, p. 37, 353; Senate Journal, 1893, p. 471; Great West, March 10, 17, 1893; Princeton Union, March 2, 1893.

cated the adoption of a cash road tax, and the following summer he himself participated in the good roads movement to the extent of attending a national good roads congress in Asbury Park, New Jersey, as the delegate of the St. Paul Chamber of Commerce.²⁸ Another powerful friend of good roads, P. V. Collins, was also a newspaper man, the editor of the Northwestern Agriculturist, a farm publication with a wide circulation throughout the northwestern states. With Dowling, he attended the good roads congress in New Jersey.²⁹

The agitation for good roads was not confined to the activities of individuals. The Minnesota State Good Roads Association named one vice-president for each county in the state, and it was expected that these officials would lead in the organization of local groups. Some of the county groups were successful; others were productive of little good. In Rice County the suggestion that a county meeting should be held was endorsed enthusiastically by the farmers' institute, and on February 11, less than three weeks after the state good roads meeting, about a hundred and fifty Rice County farmers met in Faribault to form a permanent county good roads association. The bylaws and the plan of organization were patterned after those of the state group, representation

28. Renville Star Farmer, July 14, 28, 1893, August 3, 1894.

29. Northwestern Agriculturist, 9: 209 (July 15, 1894).

being extended to every township in the county. That group, influenced by the recent state-wide convention, approved the program adopted by the St. Paul meeting. Similar action was taken in Fillmore County on March 13, when the farmers' institute met there. The progress made by the first meeting was nullified by a second assembly, held in June, when the group, dominated by the Farmers' Alliance, proceeded to divorce itself from the Minnesota State Good Roads Association. 30

Slightly more than a year elapsed before there was evidence of any further local activity. Late in February, 1894, a call for a county good roads convention in Renville County was sent out, and on March 10 twenty-eight delegates gathered at Hector to discuss the various phases of the road problem. The Renville County meeting, however, completely repudiated the program of the state good roads convention of 1893. The bare account of the meeting published in the Hector Mirror reveals that, when the question of changing the road tax from a labor tax to a money tax was discussed, it was "the sense of this convention that the matter be left as at present." On the question of financing the construction of roads by long-term bonds, or by an immediate tax, the convention again went on record as saying that "it does not

30. Northfield News, January 28, 1893; Faribault Republican, February 1, 8, 15, 22, 1893; Great West, February 24, 1893; Preston Times, March 9, 16, June 8, 1893.

entertain either of the above propositions." State aid in building highways was completely negatived, as was the proposition that the petty road district be abolished. The only positive action taken by this meeting was that of organizing a permanent good roads association, modeled after that in Rice County, with the chairman of the board of supervisors of each township acting as a vice-president Dowling later stated that the convention's rejection of the question of issuing bonds for the construction of roads was phrased as follows: "Resolved, That we, as citizens of Minnesota and of the county of Renville, are opposed to the issuance of any more bonds for the purpose of building up roads in this county to be utilized by the bicycle dudes of the towns, and to fill the coffers of the rich with the interest that they would get from the bonds." 32

A combination of unfavorable circumstances was slowing down the good roads movement. These were: first, an unsettled economic condition, prevailing in the nation at large; second, unusually fine weather which permitted rural Minnesota to escape its usual spring mud bath; 33

31. Hector Mirror, March 15, 1894; Renville Star Farmer February 23, 1894.

32. Proceedings of the National Road Conference Held at the Westminster Church, Asbury Park, N. J., July 5 and 6, 1894, 37 (United States Department of Agriculture, Office of Road Inquiry, Bulletins, no. 10 -- Washington, 1894).

33. The Mapleton Enterprise for January 26, 1894, commented on the fine weather as a result of which Minnesota's roads had been in unusually good condition during 1893, saying: "It is only in extreme wet seasons that we realize the necessity of a better road system."

third, the opposition of a powerful political party -- the Farmers' Alliance, which had merged into the Populist party -- to any plan of road improvement which would increase the indebtedness of the agricultural classes; fourth, the natural conservatism of the farmers, who were loath to try a new method during a period of economic distress; and fifth -- a phase of the third factor working in opposition to the good roads movement -- a feeling among the farmers that they would not be coerced into building roads for "the bicycle dudes of the towns." This last was a manifestation of a friction between town and rural people which was not new. "Johnny Hayseed" was a figure of derision to the townsman, as the "city slicker" was to the farmer, a mutual antipathy which was capitalized by the opponents of the good roads movement.

The apostles of good roads were not disheartened by the turn events took. They recognized the inevitableness of the good roads movement. Collins declared:

Until recently, agriculturally, Minnesota has been almost exclusively a wheat-raising section, but there is a strong agitation now toward diversified farming, and to me it seems that as soon as we secure diversified farming in Minnesota the question of the importance and the absolute necessity of improved highways will be forced upon the farmers, and they will be obliged to take some action. In wheat raising the farmer sows his wheat in the spring and sits on the fence and watches it grow, and in the fall, when the wheat is cut and harvested, the roads are generally in a pretty good condition, and they have not felt the necessity of improving them. ³⁴

The state association in 1894 made arrangements with the Minnesota Agricultural Society for a good roads exhibit at the state fair to be held in September, and planned that one day of the fair should be designated as "Good Roads Day." A program of addresses by prominent good roads leaders was arranged, and it was hoped that this field day would be productive of good results. Choate and the others who participated were bitterly disappointed, however, for "the farmers and men supposed to be especially interested in a matter of such importance to the state, were conspicuous by their absence." Some of the disappointment of the leaders of the movement was voiced by Choate in his address to a scanty audience, in which he expressed regret for the antagonism toward the League of American Wheelmen. He pointed out that, as a class, the bicyclists were "proportionately as heavy taxpayers as any other set of men in the commonwealth, and that instead of condemnation, commendation should be their reward for the efforts put forth in behalf of the movement." 35

The hard times of the nineties, however, aided as well as injured the good roads movement. One of its effects was that of forcing manufacturers of bicycles to lower their prices. A bicycle which in 1892 had cost from a hundred and twenty-five to a hundred and fifty

35. Northwestern Agriculturist, 9: 213 (July 15, 1894); Minneapolis Tribune, September 9, 11, 13, 14, 1894.

dollars could be purchased for fifty or seventy-five dollars in 1895. This decrease in price resulted in an unexpected popularity of the machine among the less wealthy classes. In the early nineties only those of comparatively great wealth could afford to own a bicycle. After the economic chaos had passed, farmers and farmers' sons and daughters found it within their means to possess them. It became increasingly difficult for the farmers to hate the "bicycle dudes" when their own children cavorted about on the popular machines. 36

Even though farmers remained obdurate in their opposition to the bicyclists, they were not able consistently to ignore other factors working to bring about a reformation of the road system. The diversification of farming about which Collins spoke at Asbury Park in 1894 was almost achieved in that very year. In announcing the Minnesota state fair, the Minneapolis Tribune published the results of a survey made by some six hundred reporters scattered over the state showing that "diver-

36. Daily Pioneer Press, January 7, 1895; Minneapolis Tribune, September 13, 1894. Review (Mankato), June 6, 1893. The Fergus Falls Journal for July 27, 1893, gives the price of a wheel, which in 1892 sold for a hundred and fifty dollars, as eighty-five dollars. The country newspapers of Minnesota give abundant evidence of the popularity of the bicycle. At Albert Lea, for example, in May, 1894, a bicycle club with a membership of about thirty, was formed. Freeborn County Standard, May 9, 1894. The Hutchinson Leader for May 1, 1896, stated that there were about a hundred and fifty bicycles in the community, and in the issue of the Mankato Free Press for July 23, 1897, the number of wheelmen in that vicinity was reported to be about five hundred.

sity" was "the key to success." Wheat contributed about twenty-five million dollars to the wealth of the state, while other grains were estimated to be worth more than thirty-one million dollars. Fruits and vegetables added fifteen million dollars to the farmers' purse, eggs and poultry brought in five million dollars more, and dairy products were estimated to total about a million dollars. Beef and pork raised the total by an additional ten million dollars, and hay and grass seed brought an income of sixteen million dollars. The wheat crop, judged from these figures, was not as important in the farmers' income as the total of the other items, and they were just becoming aware of that fact. ³⁷

The influence of the creamery as a factor in bringing about good roads can scarcely be overestimated. Many a farmer, after he arrived at the creamery and found his cream churned to butter by the bumpy, rutty roads, learned to curse such roads fluently. To an observing person, it was evident that "every creamery is becoming the focus where center better roads, and to the creamery must be given one more credit mark besides those it has already earned as an economizer of time and labor on the farm." The reason for this was obvious, for "milk is a perishable product and its limit of preserved sweetness is a narrow one," and, therefore, "where the milk has to go to

37. Minneapolis Tribune, September 9, 1894.

the creamery there can be no staying at home until the road dries." ³⁸ That is but one instance of the pressure of circumstances which forced the farmers to alter their concepts of the good roads problem.

With the knowledge that economic factors were working to help the good roads advocates obtain improved roads, the leaders of the movement kept doggedly at their work. Moreover, they were being aided by forces close to the farmers. The influence of Collins as editor of an agricultural paper has been cited, but the whole-hearted co-operation which the college of agriculture and the agricultural experiment stations gave the movement brought the agitation for better roads closer to the rural population than any other medium could have done. Furthermore, the office of road inquiry in the department of agriculture at Washington issued one bulletin after the other to bear the message of good roads to the people not only of Minnesota but of the nation at large. In the face of changes in the methods of road making and maintenance in other states, the most conservative of Minnesota's population could scarcely help being impressed, and, from being impressed by the accomplishments of other states, it was but a step to following their example. It was noticeable that the good roads convention held in St. Paul in January, 1895, was

38. Saint Paul Globe, July 19, 1897; Mankato Free Press, July 16, 23, 1897.

attended with greater enthusiasm than had been that of 1893, and furthermore that the rural areas of the state predominated. But it was also evident that, if good roads meant higher taxes, the rural areas would "worry along as best they can with the natural roadways, patched up by a little filling and ditching here and there." 39

In the legislature the good roads advocates were more successful in 1895 than they had been in 1893. Two laws were passed, both of which had been recommended by the convention. The one provided that the owners of wagons with tires three inches wide or more should be granted a rebate on their road tax assessment of two dollars for every wagon so equipped, provided that the total amount rebated did not equal more than half of their tax. The success of similar laws in other states and the publication early in 1895 of a pamphlet by the office of road inquiry bearing on that subject undoubtedly had a great influence on the action of the Minnesota legislature in passing the bill. 40 The other law relat-

39. Daily Pioneer Press, January 7, 14, 16, 1895; Minneapolis Tribune, January 17, 1895.

40. Minneapolis Tribune, March 22, 1895; Northwestern Agriculturist, 10: 104 (April 1, 1895); Roy Stone, compiler, Wide Tires: Laws of Certain States Relating to Their Use, and Other Pertinent Information (United States Department of Agriculture, Office of Road Inquiry, Bulletins, no. 12 -- Washington, 1895). Agitation in Minnesota for wide tires had been sporadic for years. The Saturday Evening Spectator for October 28, 1882, had suggested their adoption, and in the Mapleton movement of the mid-eighties wide tires likewise played a part. In 1892 several papers suggested the enactment of laws for this

ing to good roads was a revised form of the bill permitting townships to abolish the poll tax which was so nearly passed by the legislature of 1893. It provided that, if twenty per cent of the legal voters of a township petitioned, a vote on the question of abolishing the poll tax might be taken. If the result of the vote favored the abolition of the labor tax, the supervision of the roads of the township was to be vested in the board of township supervisors, who were authorized to employ a competent supervisor to care for them. If after five years twenty per cent of the voters again petitioned for a vote on the poll tax question, the labor tax might be restored if the vote favored the repudiation of the decision. The bill as passed removed the objectionable feature of the 1893 bill -- the irrevocability of the cash tax. 41

In themselves these laws fell far short of the ideal. The enthusiasts would have abolished the poll labor tax immediately, but public opinion was against such arbitrary action. The good roads advocates would have installed a state department of skilled engineers to supervise the construction of roads, and would have set

purpose. See, for example, the Hutchinson Leader, May 20, June 3, 1892, and the Freeborn County Standard, June 1, 1892. The passage of the Wisconsin wide tire law in 1893 elicited prompt comment from Minnesota sources. See, for example, the Hutchinson Leader, June 23, 1893, and the Blue Earth City Post, July 13, 1893.

41. General Laws, 1895, p. 161-163.

up a state fund to pay at least a portion of the cost of building them. Sentiment, however, was still against a radical departure from the familiar practice, even though the legislature was willing. Home rule was clung to tenaciously by the rural districts, and the efforts of the good roads leaders were looked upon as an infringement of that right. "The farmers are competent, under the township organization, to manage the roads without dictation from the Twin Cities or any other city," one of these rural residents declared. "The people of the several townships say 'hands off' of home rule. . . . The farmers in the townships will never permit a road commissioner to govern the management of roads, or the bonding the town for road purpose. If the farmers want better roads . . . let this road movement come from the farmers." 42

In 1895 the good roads cause was aided by the organization of the Minnesota Surveyors and Engineers' Association, a body made up of civil engineers in Minnesota. Moreover, the schools were taking a more prominent part in the work of spreading the gospel of good roads. The May, 1896, number of the Farm Students' Review, issued by the state college of agriculture, was devoted to essays on good roads, and a course in road engineering was included in the curriculum of the col-

42. Lake Crystal Union, February 26, 1896.

lege of engineering as early as the fall of 1894. Whether the farmers of Minnesota wished to become converts to the good roads movement or not, they were being won over almost without being aware of it, and improved equipment was to be seen at almost every point where road work was under way. In many cases villages and smaller cities were undermining the complaint of the farmers that the entire expense of road building fell on the agricultural class by purchasing some of the more expensive equipment and lending it to the agricultural road districts, the only condition, in many cases, being that the rural road district should use it on roads leading to the village. "Such public spirit," commented Collins, "is to be commended and it has helped to make good roads popular in many counties." The smaller pieces of equipment were being sold at a lower price than formerly, and as a result their use was spreading. 43

Annual conventions of good roads advocates were held after 1895, and in 1896 a new organization, known as the Good Roads Association of Minnesota, was formed. It was headed by Judge H. R. Wells of Preston, who had been temporary chairman of the 1893 convention, and

43. Northwestern Agriculturist, 8: 340, 10: 328 (February, 1893, November 1, 1895); Minneapolis Tribune, January 20, 21, 1896; Blue Earth City Post, June 15, 1893; Mapleton Enterpriser, June 9, 1893; Mankato Free Press, July 16, 23, 1897; Engineering News, 33: 165 (March 14, 1895); Farm Students' Review, vol. 1, no. 5 (May, 1896); University of Minnesota, Catalogues, 1893-94, p. 126 (Minneapolis, 1894).

Collins was elected secretary. In co-operation with the Minnesota Agricultural Association and the Minnesota Surveyors and Engineers' Association, the organization arranged to hold annual meetings at the state fair grounds and to prepare models of good roads for exhibition. These were to be full scale and would be "well calculated to promote interest in good roads, besides furnishing valuable information." 44

The organization by this time had something definite at which to aim, for the legislature of 1895 had indicated its willingness to set up a state road and bridge fund and had passed a measure providing for the allocation of the income from the internal improvement land fund to a state road and bridge fund, which was formed from this source and the income received from the federal government as the result of the sale of United States lands in Minnesota. Before the measure could go into effect, however, it was necessary to submit it to a popular vote, for a constitutional amendment adopted in 1872 forbade the legislature to appropriate the income from the internal improvement land fund for any purpose without first obtaining the consent of the people. The measure was lost because of an insufficient vote, although a great majority of those who voted on the measure favored

44. Northwestern Agriculturist, 11: 116 (April 15, 1896); Crow Bar, vol. 5, no. 2, p. 11 (August, 1896). The latter is a monthly publication devoted to the heavy hardware trades.

its adoption. 45

Governor David M. Clough, in his address to the legislature at the opening of the 1897 session, came out vigorously in favor of adequate road legislation, advocating a "system of county roads with limited state aid," and the Good Roads Association in its 1897 convention planned a remodeled bill to submit to the legislature to replace the one which the electorate had rejected by so narrow a margin the year before. The new bill was in the form of a constitutional amendment, and it included in a road and bridge fund the money received from the five per cent fund, and the income from the internal improvement land fund, to which was added a general pro-

45. Ante, p. 309; Folwell, Minnesota, 3: 225; Kumm, Constitution of Minnesota, 96. According to Folwell, 152,765 persons voted for, and 28,991 persons against the measure. A majority of the total votes cast, however, was greater than the number cast in favor of the bill. In 1841 Congress passed a law granting 500,000 acres of land for internal improvements to every state upon its admission to the Union. When Minnesota became a state, it was assumed that the internal improvement land grant had been satisfied by the land grant made to aid in the construction of railroads. About 1866, however, it was discovered that the railroad land grant had no relation to the internal improvement land act of 1841, and immediate steps were taken by the state to obtain the lands. The amendment of 1872 was adopted to prevent the legislature from using the proceeds from the sale of these lands to retire the railroad bonds issued by the state in 1858 and 1859. In 1881, however, the redemption of the railroad bonds by means of this fund was sanctioned. In 1896 about \$365,000 remained as a permanent fund. It was this money that the legislature proposed to combine with the five per cent fund to form a state road and bridge fund. Statutes at Large, 5: 455; reports of the state auditor, in Minnesota, Executive Documents, 1866, p. 30-32, 1896, vol. 1, p. 289; Kumm, Constitution of Minnesota, 96.

perty tax of one-twentieth of a mill. The road and bridge fund thus set up was to be administered by a state highway commission of three members serving without compensation other than personal expenses. No county was to receive more than three per cent, nor less than one-half of one per cent, of the total fund expended during any one year, nor could the state pay more than one-third of the cost of any road or bridge, and not more than one-third of the fund was to be expended upon bridges. ⁴⁶

Little difficulty was experienced in getting the bill for the amendment passed by the legislature. It was, rather, in danger because of too great popularity. An enthusiastic backer of the movement proposed to introduce a bill of his own appropriating almost a quarter of a million dollars of state money to finance road construction by the state. Collins remarked: "This thing of having a plan may be all very well for 'dem bicycle fellers' but it won't do at all for statesmen who want to get at the State Treasury and make things hum. After all, wouldn't it be better to postpone all action rather than to make a plunge which would prejudice future progress?" The proposed bill was "indefinitely postponed."⁴⁷

46. General Laws, 1897, p. 600; message of Governor Clough to the legislature, in Minnesota, Executive Documents, 1896, vol. 1, p. 40; Northwestern Agriculturist, 12: 34 (February 1, 1897).

47. Northwestern Agriculturist, 12: 50 (February 15, 1897); Senate Journal, 1897, p. 95, 101, 233, 272, 294, 370, 493.

About a year and a half remained before the voters would have the opportunity to record their opinions of the constitutional amendment. Its advocates determined to use that time in preaching the gospel of good roads from one end of the state to the other. Sometimes they failed in their purpose. Thus, at Zumbrota in May, 1897, considerable disfavor with the Good Roads Association was manifested, chiefly because the representatives of the body failed to tread lightly when the question of taxation for roads was brought up, and because, in describing existing methods of road making, the speakers unfortunately touched some of the delegates on a sore spot. ⁴⁸ The editor of the Zumbrota News, describing the meeting, said:

The majority of them went away scoffing and indignant, utterly disgusted with the mass of matter presented, very little of which was of any practical value whatever. Nor can the farmers justly be blamed for their opinions in this respect. Their methods of road making were unjustly and harshly criticized, odious comparisons were drawn, reflections made which aroused the temper, and a mass of impracticable theory presented which tried the patience of all present. ⁴⁹

Other meetings for the same purpose had happier endings, however, and the good roads leaders made definite progress in arousing public opinion in favor of the movement. ⁵⁰ At each of the two state fairs which inter-

48. For accounts of the Zumbrota meeting see: Zumbrota News, May 28, June 4, 1897; Red Wing Daily Republican, May 27, 28, 1897; Northwestern Agriculturist, 12: 186 (June 15, 1897).

49. Zumbrota News, May 28, 1897.

50. Zumbrota News, June 25, 1897; Farmers' Tribune (Minneapolis), September 2, 6, 1898.

vened before the election, good roads conventions were held, and model roads were shown. During the summer of 1898 the office of road inquiry published a lengthy article by Choate, which was distributed throughout the state. Perhaps the most telling feature of this article was a series of statements by prominent Minnesotans endorsing the proposed amendment to the constitution. The list of endorsers included politicians, educators, professional men, and businessmen from every part of the state. No small item in building up public favor was the help extended by a sympathetic press, including the agricultural periodicals, although Farm, Stock and Home, edited by Sidney M. Owen, who ran for governor on the Populist ticket in 1890 and again in 1894, favored the amendment with the reservation, "but for heaven's sake no more bonded debt, at least until debt-paying becomes easier and more common than it now is." ⁵¹ Both the Republican and Democratic parties were committed to the cause of good roads in their platforms, although the planks were, on the whole, harmless enough. ⁵²

51. Crow Bar, vol. 5, no. 2, p. 11 (August, 1896); Daily Pioneer Press, September 3, 4, 5, 7, 8, 1898; Farm, Stock and Home, 13: 145, 14: 339, 371 (April 1, 1897, October 1, November 1, 1898); Northwestern Agriculturist, 13: 264, 314 (September 1, October 15, 1898); A. B. Choate, State Aid to Road Building in Minnesota (United States Department of Agriculture, Office of Road Inquiry, Circulars, no. 31 -- Washington, 1898).

52. Minneapolis Journal, June 16, July 1, 1898; Northwestern Agriculturist, 13: 358 (December 1, 1898); Daily Pioneer Press, December 24, 1898; Kumm, Constitution of Minnesota, 195; General Laws, 1899, p. vii.

The first phase of the good roads movement in Minnesota was ended with the adoption of the constitutional amendment in the election of November 8, 1898. The law of 1895 enabled any township in the state to abolish statute labor on the roads. The amendment of 1898 made it possible for the legislature to establish a road and bridge fund and organize a state highway commission. The program to this point had failed to make provision for the employment of skilled engineers by the local units of government, and no adequate supervision of local construction work by state-employed engineers was provided. Yet, the progress made by these pioneers of good roads during the era of the bicycle was great.

X. THE AUTOMOBILE AND GOOD ROADS

The good roads advocates hailed the ratification of the constitutional amendment in 1898 as the final step in the revolution in road-making methods. But they were destined to disappointment and long delays before they could enjoy the benefits which they hoped to gain from the hard-won battle, for not until 1905 was a law passed creating the highway commission provided for in the amendment, and it did not go into effect until January, 1906. The supporters of the amendment might have been prepared for this long delay had they analyzed the situation. The constitutional amendment scarcely could have been called popular. The proposal of 1895 to add the income from the internal improvement land fund to the five per cent fund received more than twice as many votes as the amendment of 1898, even though the amendment carried and the 1895 proposal failed to pass. In 1895 the people were voting on a proposition to insure aid from the state for building roads and bridges. For thirty-five years they had been accustomed to the existence of such a fund, and some of them, at least, were alarmed at the thought of losing it. Without state aid the people had to dig deeper into their own purses to pay for the roads and

bridges they sought to build. The extent of their concern can be perceived when the fact is considered that the measure lacked but ten thousand votes of having a popular majority.¹

The constitutional amendment had this same feature, but in addition it levied a fresh tax on property, and the people of the nineties did not wish to add to their tax burdens. The amendment departed radically from the established custom of leaving the administration of road affairs to the local communities by making constitutional provision for a state agency to supervise the distribution of funds for roads and bridges and to keep a watchful eye upon their expenditure. It was this feature, in particular, which caused the people to lose interest in, or else to become actively opposed to, the amendment. They were not ready to permit the expenditure of funds for local projects to be supervised by any agency other than the people. The politicians on their part were equally loath to permit any other agency than the legislature -- in other words, themselves -- to assume the

1. See ante, p. 309-317, 373-378. A constitutional amendment, until after the election of 1898, required for passage only a majority of the votes cast on the amendment. The 1872 amendment, however, required a majority of the total votes cast at the general election to permit the expenditure of the income from the internal improvement land fund. It was possible to divert the fund to the road and bridge fund by a constitutional amendment which received a smaller popular vote than a direct vote on the measure itself had received. Kumm, Constitution of Minnesota, 215.

privilege of distributing the state fund for roads and bridges. Too many of them relied on this fund to fortify their political strength at home, for the man who could obtain legislative appropriations for his district stood high in public favor.

Beyond this there were conditions at the end of the century which made the future of the good roads movement uncertain. The greatest enthusiasm for good roads came from the cities and the editors of the country newspapers. Nineteenth-century Minnesota, however, was predominantly agricultural, and the farmers were not ready to admit that their system of making roads was a failure. They resented the interference of the cities in what they called a local problem. Until the farmers could be brought to see that they had a fundamental stake at issue in the road problem, the success of the movement could not but be uncertain. Up to this time they had failed to become aroused by the fact that it was costing them twenty-five cents to haul a ton of grain one mile over the rough, mud-clogged roads of the nineties, while the cost of hauling the same amount of grain over macadamized roads would have been but a fraction of that amount. It mattered little to them what statisticians figured the cost of hauling to be so long as they did not have to pay the sum in cash. ²

2. Martin Dodge, "The Good Roads Movement," in the American Monthly Review of Reviews, 25: 66-72 (January, 1902).

It was about this time, too, that a breakdown occurred in the leadership of the good roads advocates. The movement in Minnesota owed a great deal of its impetus to the zeal of the Minnesota division of the League of American Wheelmen. By the closing years of the century, however, the league was declining, and no other body had arisen to take the leadership. The extent of the breakdown of the league is demonstrated by the fact that in St. Paul only one of the half-dozen organizations in existence in 1895 remained active in 1900, and it functioned only as a social club. In Minneapolis a similar breakdown occurred, climaxed in 1902 by the disruption of the leading bicycle club of the city -- the Flour City Cycle Club -- and the resignation of its officers and about half of its members, including A. B. Choate, the guiding spirit in the good roads movement for a decade. ³

The downfall of the organization was caused by factors inherent in it. The wheelmen of the eighties and nineties had enjoyed an exclusiveness amounting almost to snobbery. They were united in a mutual enjoyment of a sport which, because of its expense, was denied most people. The good roads objective of the organization was based upon a selfish desire to enjoy to the fullest the recreational possibilities of the

3. Minneapolis Journal, November 20, 1899; Daily Pioneer Press, August 3, 1902; Minneapolis Tribune, May 11, 1902.

bicycle. A movement sponsored by such an organization could not arouse a permanent, widespread interest among those who had to pay for the roads which the bicyclists wanted unless they could be persuaded that they, too, would participate in the benefits. During the nineties the number of bicycles in rural communities increased tremendously, and many of their owners were associated in the bicycle clubs of the state, but with the enlargement of the membership came a disruption in the homogeneous spirit of the wheelmen. The organization lost the atmosphere of exclusiveness which had been an attractive feature of its earlier existence, and as time passed the need for an organization to protect the legal interests of the members disappeared. The league, therefore, became largely a social one, and its power as a leader of the reform movement was lost. The extent of the decline in leadership of the good roads movement at the end of the century is demonstrated in the voting at the election of 1898. One commentator observed that the heaviest vote on the constitutional amendment was in the country, where the movement was weakest, rather than in the cities, which hitherto had been the principal source of strength for the good roads advocates.⁴

There was little chance of success for the good roads movement until a motivating influence could be found which would apply with equal force to both the

4. Daily Pioneer Press, November 18, 1898.

country and the city. The League of American Wheelmen did not supply that influence, nor did the Good Roads Association, for it was made up of factors which were so heterogeneous that unified action was uncertain. True, it had a permanent organization, but its chief business was that of seeing that annual meetings were held. The Good Roads Association, moreover, was constantly suspected of being dominated by the manufacturers of road-building equipment, and, until that suspicion could be erased, it was not eligible for leadership. It was but a symbol of what the idealists desired. The farmers of Minnesota, as a class, were little interested in it.

But there were factors which, in due time, were bound to bring the farmers of the state into the ranks of the good roads advocates. Even before the end of the century, they were being jolted out of their accustomed way of doing things by the revelation that the creamery was more profitable to them when they could deliver milk and cream over smooth roads while it was sweet. The idea of the consolidated school was beginning to take shape, and, if it was to take the place of the old country schoolhouse, an improvement in the conditions of the roads of the state had to be made. More potent than either of these factors, however, was the action of the national government in extending to rural areas free delivery of mail. Under a ruling of

the post-office department, the service would not be granted in areas where roads were unimproved.

The first rural free delivery mail routes in the United States were established on an experimental basis in 1896 and 1897. In Minnesota, Farmington was selected as a point for experimentation, and there on January 1, 1897, delivery service was begun over four routes. By 1899 mail was delivered over fourteen routes in the southern portion of the state. The demand for the service was widespread, and the agent to whom was delegated the administration of the rural delivery service in Minnesota found that "districts anxious to secure the privileges incident to the service make it a point to charge the proper authorities with the improvement of badly built roads, and see to it that all new roads are constructed in the best manner possible." By 1907 there were more than fifteen hundred rural mail routes in operation in the state, and their influence in promoting better road conditions was everywhere apparent.⁵ One commentator remarked that the prospects for getting mail delivery gave, in many communities, "a stimulus to the movement for good roads equal to that of the bicycle."⁶

Various explanations were given for the eagerness

5. Post-Office Department, Reports, 1899, p. 242-244, 1907, p. 350-353; Dakota County Tribune (Farmington), November 12, 19, 1896, January 7, 1897.

6. Daily Pioneer Press, September 4, 1899.

of the farmers to get the mail service. All agreed that it broke the isolation of farm life. The special agent of the post-office department in Minnesota in 1899 noted that as soon as a farmer got rural free delivery he subscribed for at least one daily newspaper. He inferred from that fact that the farmers desired to keep up with current events. One phase of the current events with which the farmer was particularly eager to keep in touch was the condition of the market. If he could take advantage of a slight rise in the price of corn, grain, or hogs, the gain for him often meant the difference between a profit on his crop and breaking even, or suffering a loss. The condition of the market meant a great deal to the average farmer of Minnesota, but he soon found that, if he could not travel over the roads to take advantage of the favorable prices, he gained nothing by knowing when they were high save an opportunity to curse the weather and the roads. It was easy then to convince him of the necessity of good roads. ⁷

Another powerful incentive for good roads was in the near offing at the close of the century. The automobile, driven by an internal combustion engine, was more than a theoretical possibility by that time. Ever since the railroad had come into practical use, men had been trying to adapt steam to transportation on the com-

7. Post-Office Department, Reports, 1899, p. 242-244; Northwestern Agriculturist, 16: 382, 18: 227 (November 15, 1901, April 15, 1903).

mon roads. The experiments of Joseph R. Brown on the prairie roads of Minnesota and Nebraska in the sixties were typical of what was going on in a dozen places in America and Europe. During the early nineties a car driven by a steam engine was placed on the American market by the Stanley Brothers, and it was followed by the Locomobile, a cheaper car made under the same patent. The steam automobile played a big part in making America automobile-conscious, but it was the internal combustion motor which made the automobile economically practicable. There had been successful European experiments with internal combustion motors as early as 1864, and during the eighties Daimler and Benz in Germany produced vehicles propelled by such motors on a commercial scale. In America George B. Selden filed an application for a gasoline-driven automobile in 1879, but it was not until the early nineties that Charles E. Duryea, Henry Ford, and Ellwood Haynes actually built successful automobiles driven by gasoline engines. The demonstration of the practicability of these American machines, together with those imported from Europe and the steam-power cars, soon made America as automobile-crazy as, a dozen years earlier, it had been bicycle-crazy. In 1894 the first automobile show was held in Chicago, although there probably were not many more than a half-dozen automobiles in the country. In 1898 there were said to be less than thirty of them, but by 1900 more than three thousand

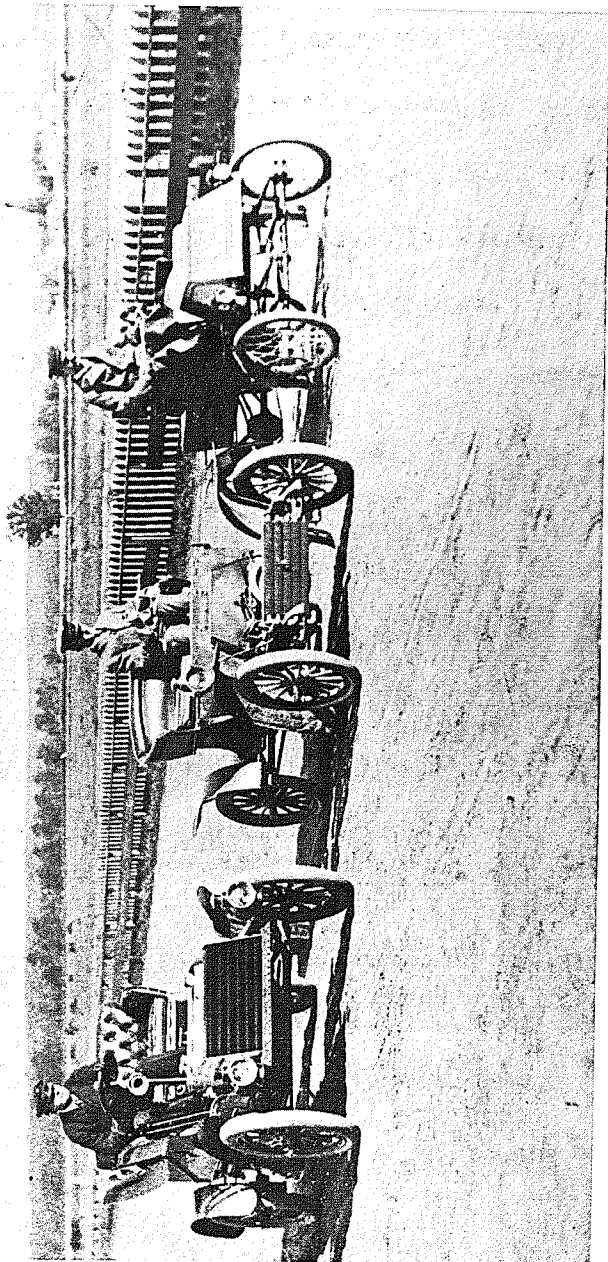
automobiles were in use in the United States. ⁸

A Minneapolis newspaper reporter attending the Chicago automobile show in 1894 conceived the idea of bringing an automobile to Minneapolis for the bicycle show which was to be staged in that city in 1895. So far as can be determined, that car, of obscure origin, was the first to venture on Minnesota soil. It was not long before the car fever hit Minnesotans. Within a short time, Swan J. Turnblad, publisher of Svenska Amerikanska Posten, and Edmund J. Phelps, a Minneapolis banker, had purchased automobiles, and the A. E. Chase Company of Minneapolis became the sales agent for the Oldsmobile, which was run by a fourteen horsepower motor and had earned the sobriquet of the "rolling peanut." Within a year the firm had taken orders for about 200 cars. By 1902 there were said to be approximately 125 automobiles in Minneapolis alone, and the number in St. Paul and the rest of the state cannot even be guessed at. ⁹

The story of the growth of the popularity and use of the automobile curiously parallels that of the bicycle. Early in the history of the bicycle the devotees of the sport formed the League of American Wheelmen.

8. Ante, p. 253-257; Mitman, in Smithsonian Institution, Reports, 1934, p. 339-344; C. B. Glasscock, The Gasoline Age, 23, 38 (Indianapolis and New York, 1937).

9. Smith B. Hall, "How the Automobile Came to Minneapolis," in the Gopher-M, vol. 11, no. 4, p. 15 (January, 1926); Minneapolis Journal, July 19, 1902.



ENTRIES IN AN EARLY AUTOMOBILE RACE AT THE
STATE FAIR GROUNDS IN ST. PAUL
[From a photograph in the possession of
the Minnesota Historical Society.]

Almost as soon after the introduction of the automobile, owners of cars united to form the Automobile Club of America, the predecessor of the American Automobile Association. The first meeting was held in New York on October 16, 1899. In Minnesota the organization of car owners proceeded almost as rapidly. In 1902 the owners of cars in Minneapolis began to talk of forming an automobile club, while the following year the Automobile Club of Saint Paul was organized. Soon similar clubs were established in the smaller cities of the state. In 1907 they united to form the Minnesota State Automobile Association and by 1914 there were thirty-seven automobile clubs associated with the central state organization. At the end of 1918 there were sixty-three member groups. 10

The motive behind the organization of the automobile clubs in Minnesota and elsewhere was much the same as that which had dominated the thought of the pioneer wheelmen. They were organized for mutual protection, and to facilitate "the efforts of the . . . clubs toward the procuring of fair and equitable automobile legislation and Good Roads for Minnesota." The good roads aim was even more dominant in the automobile organizations

10. Glasscock, The Gasoline Age, 30; Minneapolis Journal, July 19, 1902; Automobile Club of Saint Paul, Year Books, 1919-20, p. 3; Sparks from the Minnesota State Automobile Association, vol. 1, no. 2, p. 4, vol. 6, no. 2, p. 3, 5 (February, 1914, February, 1919).

than it had been in the League of American Wheelmen, and committees were constantly working to develop a good roads program in the legislature. The automobile clubs did far more than that to further the cause of good roads. From the proceeds of their membership dues and from voluntary contributions they gleaned a revenue which was applied to improving roads. In Lake City, for example, thirteen of the thirty automobile owners were members of the automobile club in 1909. This small group went on record as favoring a program to help the farmers build roads, and in evidence of their sincerity voted at one meeting to appropriate sixty dollars from the club's treasury to help build a badly needed road in the vicinity. The Minneapolis Automobile Club annually spent several thousand dollars to grade, oil, and otherwise improve the roads of Hennepin County. In one year, 1914, this item in the club's expense account amounted to more than \$6,500. They devoted themselves to every phase of activity which would further the cause of good roads, sending out speakers to rural communities where interest was manifested, organizing good roads tours, and, in general, performing the work which the Good Roads Association had done a few years earlier. ¹¹

11. Sparks, vol. 1, no. 3, front cover, p. 7, 8, 12 (March, 1914); Lake City Republican, May 22, 1909; Automobile Club of Minneapolis, Reports, 1914, p. 14-21, 28-30.

As in the case of the bicycle, most of the owners of the early automobiles were city residents. So long as this condition prevailed, the cause of good roads suffered rather than benefitted from the automobile. The farmers of Minnesota were tired of listening to the "city sports" who owned bicycles clamor for good roads, and they were not inclined to look kindly upon the activity of the automobile owners in behalf of the country roads. The editor of Farm, Stock and Home, noticing this tendency, asked, "Is it true that the coming of the automobile has decreased the country peoples' interest in good roads? 'Twould not be surprising if true." The man whose team had been frightened into a runaway by one of the snorting, coughing "devil wagons" of the early twentieth century was not likely to approve of the efforts of the owners of such machines to improve the road which ran past his farm. 12

Some groups, feeling that their economic welfare was dependent upon the permanence of the horse and buggy, deliberately fostered this attitude on the part of the farmers. Among them were the buggy and wagon makers -- although the outstanding success of the Studebaker Company as a manufacturer of automobiles belies that stand-- and the rural blacksmiths who feared that their business of repairing wagons and buggies and shoeing horses would

12. Farm, Stock and Home, 21: 335 (July 15, 1905); Lake City Republican, July 10, 1909.

be ruined by the competition of the automobile. It had not occurred to them that they might profit from the new form of transportation by learning the workings of the automobile and becoming the agents for repairing them when they broke down, as they frequently did. It was several years before the hostility of the blacksmith was sufficiently overcome to permit him to lay aside his farrier's apron and crawl beneath the awkward automobiles of the early twentieth century to repair their mechanical defects. The shift was a natural one, for the blacksmith was an all-round mechanic, the one man to whom all the countryside turned when farm machinery broke down. It was as easy for him to repair the temperamental automobile as any other piece of machinery, once he had become acquainted with its parts, and the work proved to be a great deal more profitable. A parody on the "Village Blacksmith" published in Crow Bar in 1906 shows that the blacksmith was beginning to awaken to the possibilities that the new machine offered for filling his purse.

Under the spreading motor car
 The village smithy lays.
 The smith, a foxy guy is he;
 He's struck a job that pays.
 No horse to shoe; no wheel to mend,
 But o'er his door this sign displays,
 "Autos fixed from end to end." 13

The evolution of the country blacksmith into a garage mechanic can be traced through the columns of

13. Crow Bar, vol. 15, no. 4, p. 6 (April, 1906).

Crow Bar, the mouthpiece of the blacksmiths of the Northwest. At the opening of the century, Crow Bar echoed the derision which most of its readers expressed for the "gas buggy." By the end of the first five years of the new century, however, Crow Bar was a little uncertain in its hostility toward the automobile. It began to carry items of information about internal combustion engines, particularly engines such as the blacksmith was likely to use for power production in his business. Soon designs of automobile engines appeared, and beginning in June, 1908, there was a regular column, entitled "Automobile Repair Department." Then the capitulation of the blacksmith was complete, and in an editorial in the issue for December, 1908, the confession was made that "if farmers will insist upon buying automobiles, it is important that the blacksmith learn enough of ordinary automobile repairing to do the class of work which would naturally come to his shop." This magazine in later years became a semi-official publication of the motor trades industry of the Northwest under the title, Automotive Journal. 14

The secret of the change of heart of the village blacksmith toward the automobile lay in the increasing popularity of the machine. He was convinced that it

14. Crow Bar, vol. 17, no. 6, p. 20, 21, no. 12, p. 5 (June, December, 1908). An article describing the manufacture of automobile bodies in blacksmith and carriage shops is published in Crow Bar, vol. 14, no. 7, p. 22 (July, 1905).

had come to stay, and, therefore, he could ill afford to ignore it. The same change took place in the minds of the farmers. Whether the roads were good or bad, they found that the chugging automobile continued to travel past their doors. When an adventurous soul in a near-by village purchased a machine, they scoffed at him. They thought that the neighboring farmer who was persuaded to buy one of the contraptions was a first-rate idiot, but often their lingering resentment toward the machines was dissipated by a ride in the wonderful conveyance. When the era of the low-priced car arrived, the same farmer who so feelingly had cursed the automobile which frightened his team hesitatingly became the owner of one. The ownership of that automobile supplied the unifying influence that brought city and country together in a desire for improved roads. The power of the increasing number of automobile owners was not perceptible immediately, but by the end of the second decade of the twentieth century they were able to bring about the adoption of the revolutionary changes in the road system which were embodied in the Babcock amendment to the state constitution. 15

15. As early as 1908 the growing popularity of automobiles among farmers was noted. See, for example, the Lake City Republican, September 19, 1908, and the Daily Pioneer Press, June 13, 1909. No count of automobiles before 1909 is available, because of the absence of a uniform license act. In 1909, when the first licensing act took effect, the secretary of state reported that there were 7,000 automobiles and 4,000 motorcycles

During this period of the emergence of the automobile age, good roads advocates in Minnesota continued their work for better roads. With the co-operation of the faculty of the college of civil engineering of the University of Minnesota, a two-fold program was undertaken. The professors in the college, for instance, made educational speeches throughout the state in favor of the good roads program. In addition, they trained students in the science of road construction, and one expedient that they tried was of particular value as a means for educating both the students and the public. Students enrolled in the course in highway engineering were sent out to selected localities to study road problems, and their findings, accompanied by appropriate maps and sketches, were submitted to the faculty as term papers. The best of these studies were published in an agricultural newspaper with a wide range of readers in the state. These essays presented the problems of scientific road construction in the specific localities which were studied so plainly that readers of the paper could hardly travel over those roads without critically examining them in the light of what engineers had to say about them. 16

registered in the state. In 1920 there were 300,000 licensed motor vehicles. Secretary of State, Reports, 1909, p. 4, 1920, p. 3.

16. Farm, Stock and Home, 16: 175, 17: 57, 72, 163, 222 (April 1, 1900, January 1, 15, March 15, May 1, 1901).

Nationally, the good roads advocates were exceptionally active during the opening years of the twentieth century, with the greatest concentration of effort in the southern states where road conditions were worst. The railroads quickly found that it was to their interest to assist the good roads movement, and several of them employed somewhat novel means to popularize the good roads idea. One railroad company, for example, built short pieces of improved roadway in the vicinity of its depots. The officials in charge took pains to see that the improved portions terminated where the natural roadways were worst. This was claimed to be a very effective way of teaching the lesson of good roads. ¹⁷

The railroad companies also participated in the good roads movement in other ways. In 1900, at a national good roads convention held at Chicago, the suggestion was made that a railroad train equipped with all the paraphernalia needed for constructing the best of roads should be sent out to demonstrate road-making methods. The promoters of the plan obtained the co-operation of the railroad officials, and the Illinois Central Railroad Company furnished without charge an engine and rolling stock sufficient to transport the necessary equipment. From the manufacturers of road-making equipment were obtained the machines and the men to operate

17. Earl Mayo, "A Good Road, A Good Investment," in World's Work, 2: 1285-1289 (October, 1901).

them. During the spring of 1901 the train traveled the entire length of the Illinois Central system, stopping at numerous places to hold good roads conventions and build demonstration roads. That good roads train proved so popular that another train was outfitted that fall to tour the southeastern states.¹⁸ During the summer of 1902 the Chicago, Burlington and Quincy Railroad Company was persuaded to run a good roads train over its line from Chicago to St. Paul, and the Great Northern Railway Company agreed to run it over its road from St. Paul westward. The tour was so arranged that the train was at St. Paul during the state fair in September, where the demonstration work aroused great enthusiasm. In 1905 the Northern Pacific Railroad Company sponsored a good roads train which began at St. Paul and ran to Portland, Oregon, where a Pacific coast good roads convention was held.¹⁹

In many of the southern and eastern states the good roads movement by 1900 was considerably further

18. Proceedings of the National Good Roads Convention Held at St. Louis, Mo., April 27 to 29, 1903, 11 (United States Department of Agriculture, Office of Public Road Inquiries, Bulletins, no. 26 -- Washington, 1903); Martin Dodge, comp., Road Conventions in the Southern States, and Object-Lesson Roads (United States Department of Agriculture, Office of Public Road Inquiries, Bulletins, no. 23 -- Washington, 1902); Dodge, in American Monthly Review of Reviews, 25: 66-72; Earl Mayo, "The Good Roads Train," in World's Work, 2: 956-960 (July, 1901).

19. Minneapolis Tribune, July 13, 17, 20, 1902; Minneapolis Journal, July 18, September 1, 2, 3, 1902; Daily Pioneer Press, April 8, 1905; Northwestern Agriculturist, vol. 20, no. 22, p. 2 (June 3, 1905).

advanced than it was in Minnesota. In some respects, Minnesota was still a frontier state. There were whole counties in the northern portion which were unoccupied by settlers as late as 1905. In other counties the process of settlement was just getting under way. It was impossible, from the financial standpoint, for such counties to talk of building permanent roads or improved roads when they had no roads at all, or at best, but a few roughly cut trails. This frontier area kept the good roads movement from gaining the momentum it had attained in other states. More potent were the factors of climate and soil. One of Minnesota's most earnest good roads advocates returned from a visit to St. Louis in the winter of 1903 considerably humbled and grateful. He stated:

We made a trip to St. Louis last week and came home more thankful than ever that we live in a region where w-i-n-t-e-r spells "freeze," and does not mean mud. The contrast between the hard, frozen roads of Minnesota and the mud, hub-deep, throughout rainy, drizzly, foggy Missouri, was great. We think we have need for road improvement in the North, but until we see the South in winter we should be modest in our complaints. . . . Perhaps other states south of the frozen ground are just as bad, but -- Oh Missouri! No wonder there were kickers against Jefferson's purchase of Louisiana Territory for \$15,000,000, for it was made in the muddy season.

While Minnesota's roads were muddy and sticky during the spring and fall, they usually were covered with a cushion of snow during the winter months, and for a large portion of the state the road problem never was one of mud alone, but was equally concerned with sand.

Sand roads were seldom difficult to travel over when the season was wet; they became troublesome during dry weather. ²⁰ Admittedly there was a need for improved roads, but, in comparison with southern conditions, it was far from acute, and the good roads movement lagged accordingly.

In the legislature, the good roads movement made slight progress during the half-dozen years after the adoption of the amendment of 1898. In 1901 an attempt to abolish the labor tax was rebuffed, and a compromise agreement was reached whereby counties with a population of 150,000 or more were permitted to levy road taxes in money instead of labor, but since this law applied only to the counties of Hennepin and Ramsey, it offered but slight encouragement. After the legislative session was over, the editor of the Northwestern Agriculturist, reviewing the futile efforts to enact good roads legislation, was decidedly pessimistic about the prospects for the good roads program. "Oh the perversity of some farmers in regard to methods of improving roads!" he exclaimed. "The hardest people in the world to arouse to an interest in real road improvement are the very farmers who use the roads most, and who annually pay the dearest for bad roads." The responsibility for defeating the bill abolishing the labor

20. Northwestern Agriculturist, 18: 92 (February 15, 1903); State Highway Commission of Minnesota, Reports, 1908, p. 54-56.

tax he laid on "some farmer statesman," who objected to the measure "because he feared some manufacturer of road scrapers would sell some scrapers, and make money under the new law. The question of whether the purchase of improved machinery might not be as true economy in county work as the use of a riding plow instead of a grub hoe is in farm work, cut no figure." The legislature in 1903 was no more willing to abolish the road labor tax than it had been in 1901. ²¹

In 1903 a bill to establish a highway commission under the terms of the amendment of 1898 was allowed to die through the failure of the House to push it through. ²² In 1905 the situation was different. Before the session was a month old, three bills to provide for the establishment of the commission had been introduced in the House, and early in March a bill for the same purpose was introduced in the Senate. All four of these were scrapped, however, in favor of a substitute bill which was prepared by a joint committee of the House and Senate. It was accepted by both houses with surprisingly few amendments, and with a minimum of argument. In the House sixty-nine members voted for it, and only seven opposed it. In the Senate the vote was thirty-five to

21. General Laws, 1901, p. 411; Northwestern Agriculturist, 16: 144 (April 15, 1901); Senate Journal, 1903, p. 154, 256, 450, 600; House Journal, 1903, p. 1130, 1260.

22. Senate Journal, 1903, p. 328, 529, 644, 1011; Princeton Union, March 9, 1905.

five in favor of the bill. 23

The highway commission bill provided for the appointment, by the governor, of a three-man, nonsalaried board of commissioners. To insure an equitable representation for all parts of the state on this commission, the law stipulated that not more than two of them should belong to the same political party, and that one member of the board should be appointed from the first, second, third, or fourth Congressional district, the second, from the fifth, sixth, or seventh district, and the third, from the eighth or ninth district. One of the appointees was to serve a one-year term, the second, a two-year term, the third, a three-year term, and their successors were to be appointed for three-year periods. Their only compensation was an allowance for personal expenses while they were engaged in official business. They were to appoint as secretary of the commission a competent engineer who was an experienced road builder. He was allowed a salary of \$1,800 per year, and an additional allowance of \$50 per month was made for a stenographer. It was the duty of the engineer to "give such advice, assistance and supervision with regard to road construction throughout the state, as time and conditions will permit and as the rules and regula-

23. House Journal, 1905, p. 54, 68, 129, 592, 593, 796, 820, 847; Senate Journal, 1905, p. 319, 563, 914, 915; Princeton Union, February 9, March 9, 1905; Daily Pioneer Press, March 4, 1905.

tions of the commission may prescribe." 24

The duties of the commission were not onerous nor likely to interfere with the rights of local self-government. It was to locate road-building materials in the state, to ascertain the most approved methods of road building for this state, to collect information about methods in other states, and to "hold public meetings throughout the state when deemed advisable." On December 15 of each year it was required to submit to the governor a printed report telling the number of miles of state roads built during the year and the cost of building them, and making recommendations as to needed legislation for the state. The sum of \$6,000 was appropriated annually to pay the expenses of the commission. 25

The commission distributed the money in the road and bridge fund among the counties. The distribution was to be based on the amount of money the counties levied for roads and bridges, taking into consideration their size, the new roads needed, and the difficulty of constructing them. No county was to receive more than three per cent of the fund, nor less than one-half of one per cent in any one year, and in no case was the state aid to exceed one-third the amount raised by the county for roads and bridges. The county board could select any roads it saw fit to receive the state aid, and these roads were designated state roads. Wherever

24. General Laws, 1905, p. 198, 199.

25. General Laws, 1905, p. 199, 200.

practicable, the state engineer was to make the surveys and prepare plans and specifications for the roads to be built, although he could name the county engineer or surveyor as his deputy to do this work for him. The payments by the state were made annually upon receipt of a report from the county auditor showing the amount of money expended for roads during the year. ²⁶

The highway commission law was termed "an admirable measure," and "an excellent bill," but it fell far short of the ideal. The commission had only advisory powers, excepting in the distribution of road and bridge funds. It had one advantage, however, which the good roads advocates used to its fullest extent. In its official capacity, the highway commission could call meetings whenever it deemed them necessary. In doing so, its members were able to serve the cause of good roads well, for during the first year of its existence the commission held forty-one meetings, most of which were "exclusively good roads conventions." ²⁷

The detailed story of the activities of the highway commission and its successor, the highway department, is not a part of this story, except in so far as those bodies aided in furthering the revolution in road-making methods from the careless, local efforts of

26. General Laws, 1905, p. 200-202.

27. Daily Pioneer Press, March 4, 1905; Northwestern Agriculturist, vol. 20, no. 9, p. 16 (March 4, 1905); State Highway Commission of Minnesota, Reports, 1906, p. 13, 14.

the nineteenth century to the centralized system of highways which is characteristic of Minnesota after 1920. In that connection alone, their participation was great, for a large share of the progressive thought which led to that revolution emanated from them, and they established high standards of work which they forced the local units of government to follow. That this was true depended upon the caliber of the men who led the department, and the measure of their success is attested by the present-day system of roads. Governor Johnson named as the three members of the highway commission men who were interested in the good roads movement. Gustave Scholle of St. Paul was chairman, and serving with him were J. B. Galarneault of Aitkin and Charles Halvorson of Dawson. The state was particularly fortunate in the selection as state engineer of George W. Cooley, an engineer of distinction, who had a varied experience as a civil engineer for the Northern Pacific Railroad and as county surveyor of Hennepin County. In him a direct link with the good roads association was provided, for he was a past president of the state organization and long had been identified with the movement. The personnel of the highway commission was subject to change, but Cooley remained as head of the technical division of the commission for eleven years. 28

28. Northwestern Agriculturist, 17: 50 (February 1, 1902); Minneapolis Journal, September 2, 1902. To illustrate the high standards of work of the state highway commission, see the series of Bulletins which were published by that body.

The passage of the act creating the highway commission did not mean that the revolution in Minnesota road making was complete. A dozen years passed before the commission was strong enough to take an independent stand on matters of policy. During that time it had to combat the half-resentful attitude of the rural districts and win them over to an acceptance of the high standards of scientific road building. It was handicapped by a dearth of funds, for the road and bridge fund provided but meager resources for an ambitious program. It had to overcome the conniving of politicians who were jealous of the loss of the power which they formerly had exercised in the distribution of the road and bridge fund.

As early as 1901 proponents of the good roads movement had sought to increase the amount of the tax levied for road and bridge purposes. An amendment to the constitution proposed that year provided for an increase in the levy from one-twentieth to one-tenth of a mill. The amendment failed to gain the approval of the voters at the general election of 1902. In 1905 a new constitutional amendment was proposed which raised the tax levy to one-fourth of a mill. After the election of 1906, the state canvassing board declared that the amendment had lost, but an appeal from this decision was made in the district court of St. Louis County in December following the election. The basis for the appeal was

that on the ballots the numbers for the road and bridge fund amendment and for another amendment which was submitted at the same time were reversed from the order in which they appeared on the tally sheets and tally books. As a result, votes cast for one amendment were credited to the other, and a general mix-up occurred. The canvassing board had assumed that the error in numbering was of no consequence, but when a portion of the ballots were recounted, it was found that the road and bridge fund amendment consistently gained in votes, and on the strength of this gain the court decided that the amendment had carried. Since there was no appeal from this decision, the amendment of 1906 became a part of the basic law of Minnesota. 29

While the fate of the amendment was still undecided, however, the legislature had drawn up a new amendment which departed radically from the one supposedly lost in the election of 1906. This measure provided no limit to the amount of tax that could be levied and removed the minimum of one-half of one per cent which might be allotted to a county for state aid in any one year. Under the law in force, as well as the amendment voted upon in 1906, if the total cost of the work performed on roads within the county which were designated as state roads did not equal three times the one-half

29. Kumm, Constitution of Minnesota, 195; Anderson and Lobb, History of the Constitution of Minnesota, 153; General Laws, 1901, p. 111, iv, 1905, p. 280.

of one per cent minimum, the county could receive no state aid, and, because some counties had financial resources insufficient to expend such sums on a limited number of miles of road, they received no aid whatsoever. The highway commission felt that it would be fairer to pay the counties in proportion to the amount of work done regardless of a minimum, and this, clearly, was the intent of the new amendment. The electorate of the state, however, failed to take an interest in an amendment which would permit unlimited taxation, and in the election of 1908 it was lost.³⁰ In 1909 the legislature tried again to find a satisfactory solution to the problem of increasing the amount of state aid, and a more adequate method of dispensing that aid. A new amendment was drawn up for submission to the people which retained the principle of requiring a minimum payment of one-half of one per cent of the fund to every county, but it changed the proportion of state aid from one-third to one-half. This had the effect of reducing the amount of work that a county had to do in order to qualify for state aid, and on this basis it was approved by the highway commission, although that body would have preferred that there should be no requirement on the part of the counties. This amendment was approved by the voters at the election of 1910.³¹

30. Kumm, Constitution of Minnesota, 196; General Laws, 1907, p. 784.

31. Kumm, Constitution of Minnesota, 196; State Highway Commission of Minnesota, Reports, 1908, p. 4, 1909-11, p. 5.

During the summer of 1909 occurred an event which bore decisively on the question of the adoption of this amendment and upon the future development of the highway commission. This was the famous "pork barrel" verdict of the Minnesota Supreme Court which defined closely the limits of state participation in road and bridge building. It was a well-established procedure, before the creation of the highway commission, for the legislature to disburse, by specific appropriations, the money accruing to the road and bridge fund. The act creating the commission, however, specifically provided that state aid should be apportioned among the counties by the highway commission. Legislators then found that they had given away one of their biggest opportunities for building political fences, for many of them owed their popularity at home to the fact that they had been able to obtain appropriations for the construction of roads and bridges which popular fancy decided were necessary to the well-being of the different communities. 32

In 1907 the legislature, confronted with this situation, sought to evade the consequences of this dele-

32. The Daily Pioneer Press for July 12, 1909, contains a letter written by a resident of St. Paul commenting on the history of the five per cent fund from which appropriations for road and bridge purposes were made prior to the creation of the new road and bridge fund in 1905. He said: "This old 'pork barrel' was a real legal one, and never did much good nor any damage. It made many a 2 x 4 legislator look like a tall pine tree at home, however."

gation of power by making a lump appropriation from the general revenue fund and distributing this sum among the counties in the same way that the politicians of the nineteenth century had apportioned the old road and bridge fund. Accordingly, a general law was passed in 1907 providing an annual appropriation of \$200,000 for roads and bridges and stipulating that the sums appropriated for the different counties should be spent under the supervision of the boards of county commissioners. Not satisfied with this arrangement, the legislature in 1909 amended the act by increasing the amount of the appropriation to \$300,000 annually, and providing that the sums should be spent by commissioners named by the legislature. 33

These two general acts, and the appropriation measures accompanying them, constituted the so-called "pork barrel." 34 Undoubtedly many of those who voted for the measures were actuated by a desire to help the counties build better roads. The policy of the highway commission in requiring counties to designate specific roads upon which the money received from the state was to be spent before they were eligible to receive state aid meant that many counties which were dilatory in selecting roads received no aid. Other which failed

33. General Laws, 1907, p. 248, 1909, p. 82.

34. The laws making specific appropriations for counties are to be found in General Laws, 1907, p. 561-573, 1909, p. 638-699.

to spend the required proportion of county funds also failed to receive the aid. The money for these counties, therefore, was left to accumulate in the state treasury. The money appropriated from the "pork barrel" was subject to no such regulation, and might even be applied as the county's contribution to the construction of a state-aid road. In common talk, however, this appropriation was referred to as the "pork barrel," and the fund was admittedly "a sop to the country legislators who wanted an appropriation of some sort for their districts." 35

Shortly after the session of 1909 adjourned, Senator L. O. Cooke of Lake City asked for an injunction to restrain the state auditor, Samuel G. Iverson, from issuing checks for the appropriations made by the 1909 legislature. The case was argued in the Ramsey County district court, and on June 7, 1909, Judge H. R. Brill granted a temporary injunction on the grounds that the state constitution prohibited the state from engaging in works of internal improvement, except to the extent permitted by the constitutional amendment of 1898, superseded by that of 1906. He held that the legislature had no constitutional authority to appropriate funds from the general revenue fund for that purpose. The state immediately appealed the verdict to the Minnesota Supreme Court, and that body, on July 9, 1909,

35. Daily Pioneer Press, June 8, 9, 29, 1909.

upheld the opinion of Judge Brill. The state's participation in road and bridge construction was clearly limited. 36

The resentment aroused by Judge Brill's decision was directed at Senator Cooke, the Twin City newspapers, and the highway commission. On June 26 a meeting of thirty-five rural senators was held at the capitol. Only one of them had a kind word to say for the highway commission; most of them were as contemptuous of it as they had been of the early attempts to further the cause of good roads. A senator from Kittson County declared that "we know more about building roads in Kittson County than all these people in these offices in St. Paul." Another declared that the money in the general appropriation would "produce twice as good results as if it were given to the Highway Commission to spend." In a statement addressed "To the People of Minnesota" this group pointed out that the highway commission existed only at the will of the legislature, for the amendment adopted in 1906, which superseded that of 1898, omitted all mention of that body. They felt, presumably, that it could be abolished at the will of the legislature. 37

36. Daily Pioneer Press, June 8, 9, 11, 29, 1909; Northfield News, July 17, 1909; 108 Minnesota Reports, 388-399.

37. Daily Pioneer Press, June 11, 12, 26, July 10, 12, 1909; Northfield News, June 12, 26, July 17, 31, 1909; Lake City Republican, June 19, July 17, 1909.

The Supreme Court decision, however, acted as a bolster for the commission, for there was no disposition shown by following legislatures to abolish it, and, indeed, since the incentive for independent action was removed, succeeding legislatures showed a greater tendency to work with the commission. Moreover, the decision demonstrated forcefully the need for a systematic plan of road work. The decision probably had some influence in determining the success of the constitutional amendment at the polls in 1910. Its influence also extended beyond that date, for in 1911 the legislature proposed a new constitutional amendment which increased the tax levy for state road and bridge purposes from one-fourth of a mill to a mill. This amendment was ratified by the voters in November, 1912. More state aid for roads and bridges was needed, and in view of the "pork barrel" decision, the only way in which that aid could be granted was through an increase in the regularly authorized state property tax for roads and bridges. 38

There was a fundamental, though unrecognized, need for a change in the whole system of road administration in Minnesota during these years, and the almost biennial submission of constitutional amendments and the "pork barrel" are but evidences of that need for a

38. Daily Pioneer Press, June 8, 9, 1909; State Highway Commission of Minnesota, Reports, 1914, p. 11; General Laws, 1911, p. 577; Kumm, Constitution of Minnesota, 197.

change. The road laws of Minnesota were based upon the requirements of an age which depended upon horse-drawn vehicles for its transportation. But Minnesota was emerging into a period when the means of transportation was changing. The automobile of the earliest years of the twentieth century, perhaps, could have been adapted to the road system as it was. It is characteristic of the automobile industry, however, that it has produced new and improved models almost every year since the birth of the industry. From the technological standpoint the machines of 1910 represented as great an advance over the models produced in 1900 as the cars of 1920 did over those of 1910. The speeds at which they could move was greatly increased. Their weights were much greater, and their other features were changed in proportion. Besides the technological advances made during a decade or more of manufacturing, the greatly increased number of automobiles in common, every day use had to be considered. In 1900 the appearance of an automobile was sufficient to arouse curiosity and excitement. By 1910 the ownership of automobiles had been extended to all classes of the population, and almost everyone at some time or other rode in them. The narrow country roads, with their frequent bumps and mudholes and sharp corners were inadequate for the new burden of traffic which they were compelled to bear.

In 1903 the legislature decided that something had

to be done to keep the automobile in check, and the law passed that year was the first traffic code enacted by the state legislature. It provided that all automobiles had to have a license to operate on the roads of Minnesota. A license, procurable at a cost of two dollars, was issued by the boiler inspectors of the state. One-half of the fee was turned over to the treasurer of the county in which the owner of the machine resided, and the other half was retained by the boiler inspector as his fee for issuing the license. The inspector gave each machine a number, which had to be displayed in figures not less than four and one-half inches high. The speed of cars was limited to eight miles an hour in towns and four miles an hour at street crossings. In the country a speed of twenty-five miles an hour was permissible, but the operator of an automobile upon meeting a team was required to come to a full stop on a signal from the driver of the horses. For night driving lights were required, and no motor vehicle was allowed to use the roads unless it had an adequate muffler.³⁹ A subsequent law placed the duty of licensing automobiles in the hands of the secretary of state, but for almost a score of years the license exacted for the operation of automobiles was simply a registration fee. It was in no sense a revenue-raising proposition.

39. General Laws, 1903, p. 646-648.

The fee varied: in 1909 it amounted to \$1.50 annually; the next session set it at \$1.50 triennially; and in 1915 the fee was raised to \$5.00 for a three-year period, to be effective in 1918. It still remained a license fee, however, and the proceeds were not used for road purposes. ⁴⁰

During the period of the emergence of the automobile age, two men rose to take a lead in formulating a constructive program of road building in Minnesota. In the village of Elk River a country merchant, who had been graduated as a civil engineer from the University of Minnesota, speculatively watched the stream of automobiles plowing through the dust and confusion of the main street, and began to wonder why more adequate means were not provided for caring for the steadily increasing flow of traffic. All the defects of the nineteenth-century road system of Minnesota seemed to plague him, and, sitting there on his store steps, he became a rabid good roads propagandist. On his own initiative and at his own expense, he set out to gain converts for the good roads cause. His zeal and his intelligent grasp of the problems that had to be faced earned for Charles M. Babcock an appointment to the highway commission in 1910 and gave him an opportunity to put his theories to the test. ⁴¹ At Princeton Robert C. Dunn,

40. General Laws, 1909, p. 305, 1911, p. 493-505, 1915, p. 40-45.

41. St. Paul Pioneer Press, November 24, 1936.

founder of the Princeton Union and a leading political figure in Minnesota since the nineties, had been convinced of the necessity for doing something about the country roads of Minnesota not long after he had voiced his plain-spoken opposition to the bill of 1893 which sought to abolish the poll tax in Minnesota. From that time to his death in 1918 Dunn used his influence to further the movement for better roads in Minnesota. Babcock's achievement lay in the practical administration of the road laws. Dunn played a leading part in formulating those laws. 42

In 1910 Dunn, who was convinced that the patchwork policy of legislating good roads was inadequate, was elected to the House of Representatives from Mille Lacs County. In 1911 the legislature revised the highway commission act. The new law raised the salary of the state engineer from \$1,800 to \$3,000, and increased the appropriation for the administration of the business of the commission to \$150,000 annually. The law provided that deputy engineers, hired by the commission, could be assigned to the different counties to supervise the road work done, whether by townships, counties, or the state itself. Furthermore, no contract on any road work in excess of two hundred dollars might be paid until the assistant engineer approved it, and, when the contract exceeded five hundred dollars, the approval of

42. Ante, p. 359, 360; Princeton Union, October 31, November 7, 1918.

the highway commission itself had to be obtained. The act designated the method of distributing state aid in accordance with the amendment approved in 1910, and provided further that state roads designated by the county commissioners had to be approved by the highway commission. The law gave the highway commission more than advisory powers, for the additional personnel enabled it to supervise directly all road work. By putting road work under the supervision of trained engineers, the good roads advocates reached another of their objectives, one which had been denied them in 1907, when the legislature passed a measure permitting counties with a population of less than 200,000 to employ a superintendent of highways who had to be a competent road builder and a surveyor. That law was termed unconstitutional by the state Supreme Court because it exempted from its provisions the three most populous counties of the state. 43

The 1911 session of the legislature passed the controversial state rural highways act, more commonly known as the Elwell law, which permitted a wider use of state funds than hitherto had been possible. Under the Elwell law, six or more land owners along the route of a road which it was proposed should be improved might

43. General Laws, 1907, p. 707, 1911, p. 45-51; State Highway Commission of Minnesota, Reports, 1909-11, p. 4, 37; 105 Minnesota Reports, 256-259.

petition the county commissioners or the judge of the district court to have a state rural highway laid out. When such a petition had been approved by the state highway commission, the road might be improved. The cost was to be so distributed that the state paid one-half, while the county and the property owners along the route of the road each paid one-fourth. To finance the construction of such roads, the county commissioners were permitted to issue bonds payable in ten yearly instalments. The law was admirably adapted to facilitate the construction of roads, and, therefore, it had the approval of the highway commission. The chief objection to it from the official point of view was that the highway commission had no power to specify what roads should be improved. A more serious flaw in it was that the decision of whether or not to issue the bonds rested not with the citizens but with the board of county commissioners. This arbitrary assignment of power to issue bonds led to indiscriminate expenditures. During the four years that the law was in force, fifty state rural highways with a total length of more than a thousand miles were constructed at a cost of about three and a quarter million dollars. The law enabled Minnesota counties to experiment with pavement -- both brick and concrete. In Winona County alone almost seventeen miles of concrete pavement were laid, together with twenty-seven miles of brick roads. Meritorious though the

experiment was, it was the excessive expenditures for these roads that caused the legislature to repeal the law. 44

Dunn's conviction that the road laws needed remodeling had grown as he sat through the session of 1911, and he ran for re-election in 1912 with that idea uppermost in his mind. When the House of Representatives was organized at the opening of the session of 1913, he was given the post he most desired -- the chairmanship of the committee on roads and bridges. For several months before the election he had been working on a revision of the road laws, and immediately upon his assignment to the coveted post he began work anew. After several weeks of intensive effort, a bill was drawn up which incorporated not only his own ideas but those of Cooley and of the attorney general, who sat in on the conferences between Cooley and Dunn and gave the bill a form which would withstand legal examination. 45

When Dunn's road code was taken up by the House, it was passed by the decisive vote of 90 to 13, and the only amendments offered were those presented by Dunn himself. The size of the affirmative vote was an interesting demonstration of the faith of the House members

44. General Laws, 1911, p. 352-354; Laws, 1915, p. 72; State Highway Commission of Minnesota, Reports, 1909-11, p. 41, 1916-17, p. 11-14; Princeton Union, October 29, 1914; Sparks, vol. 1, no. 11, p. 13 (November, 1914).

45. Princeton Union, March 13, 1913.

in the good sense of Dunn, for there were several highly controversial clauses in it. The Senate, which also passed the bill with but few changes, was not as amenable as the House, for there it met the opposition of the "Elwell combine." The opposition of the Elwell group in the Senate can be understood, for the Dunn bill contained a substitute for the Elwell measure. 46

The Dunn bill was an attempt to overhaul the road laws of Minnesota in order to adjust them to the automobile world. It embodied within it the whole program of the good roads advocates during the twenty years which had passed. It codified and brought up to date the best of the laws in the road code, and shuffled off any that were outmoded. It was typically a good roads bill, and a prominent clause in it decreed that the governor should proclaim the third Tuesday in June each year as "Good Roads Day," and that on that day the citizens of the state should donate labor, money, or materials and join to improve some section of the roads in their respective communities. 47

The Dunn law prescribed anew the relationship of the state highway commission to the counties and townships. State roads were to be constructed, improved, and

46. General Laws, 1913, p. 290-329; House Journal, 1913, p. 371, 486, 570, 1497, 1780; Senate Journal, 1913, p. 555, 1063-1066, 1080, 1111, 1135-1142, 1199-1202, 1230; Princeton Union, February 20, 27, March 13, April 3, 10, 17, 1913.

47. General Laws, 1913, p. 301.

maintained by the counties under the rules and regulations of the highway commission. County roads were to be constructed and improved by the counties in accordance with the rules and regulations of the commission, but the towns through which such roads passed were responsible for their maintenance. There was an exception to this ruling, for, in the three principal counties of the state where there were county superintendents of highways, the townships had no jurisdiction over county roads. Township roads were to be laid out, constructed, and maintained by the town boards. ⁴⁸

A considerable change was made in the manner of distributing state aid for the construction of roads. The maximum amount to be distributed to a county remained three per cent of the total amount available, but the minimum amount was increased to one per cent. If the county failed to use the full amount allotted to it, and if the unused portion, amounting to one-half of one per cent of the total amount available for distribution, remained unused for two years, it was to be returned to the state road and bridge fund. The uses to which state aid could be put were restricted. Twenty per cent of the fund allotted had to be used for the maintenance of state roads and bridges, and twenty-five per cent of the remainder could be used on county roads and bridges under terms prescribed by the

48. General Laws, 1913, p. 290-292.

highway commission. A varying proportion of state aid was allowed for the construction of individual roads. In counties where the assessed valuation was less than five million dollars, state aid could amount to as much as eighty per cent of the cost of the road. Where the assessed valuation was between five and ten million dollars, seventy per cent of the cost might be paid by the state, and, where the valuation was between ten and fifteen million dollars, the aid might total sixty per cent of the cost. In all other counties the ratio of state aid could not exceed fifty per cent. The upward limit of this state aid was defined by the amount of money available for distribution to the county. 49

State roads were to be designated by the counties, subject to the approval of the highway commission, and that approval was to be based upon the desirability of the road, the traffic conditions over it, and its relation to other state roads. If a county board refused to designate a state road, the highway commission might do so if ten residents of the county petitioned for it and if, upon examination, the commission found that the road was necessary and that a sufficient amount of money had been allotted to the county for its construction or improvement. In villages and cities of the fourth class, a street could be designated as a state road if it was a necessary link to connect other

state roads. State roads could be abandoned only by the joint consent of the highway commission and the board of county commissioners. To further the work on state roads, the commission, in accordance with the law of 1911, was allowed to employ assistant engineers. Their primary duty was to oversee work on state roads, but they were also instructed to supervise the construction of county and township roads when their services were requested. 50

A section clearly intended to be a substitute for the Elwell law provided that counties could issue bonds for macadamizing or surfacing county roads upon the vote of the citizens. Such bonds could not draw more than six per cent interest, and they were required to be payable in from five to twenty years. A county tax was to be levied sufficient to retire the bonds within the period specified. Townships might issue bonds under similar circumstances, provided that the amount of the bonds issued, together with all outstanding indebtedness, did not equal more than five per cent of the assessed valuation of the town. 51

The greatest change in the existing road laws related to the townships. The Dunn law abolished the labor tax and set a maximum tax for road purposes of fifteen mills. An emergency tax of five mills, however,

50. General Laws, 1913, p. 297-300.

51. General Laws, 1913, p. 305, 315.

might be levied after the town meeting had set the tax limit for the year. A special one-mill tax was to be levied, the proceeds of which were to be used exclusively for road-dragging purposes. But this tax was not to exceed a thousand dollars, and, where it was likely to do so, the county auditor was authorized to decrease the rate of taxation. The small road district, long an object of abomination to good roads advocates, was abolished, and each township was constituted a single road district, with a competent road builder, hired by the township, to care for the roads of the town. Where it was necessary, assistants to the road supervisor might be employed. 52

There were also sections in the law relating to the construction and maintenance of bridges. The law made provision for the conversion of toll bridges into free ones by counties, townships, or villages, by purchase, lease, or other means. Every bridge, more than thirty feet long, toll or free, was to be inspected annually by the state highway commission. An incidental clause, which later came to have great importance, provided for the removal of snow from highways and the construction of snow fences. 53

The Dunn law represented a great advance in road legislation. Its author was acclaimed as the "Father

52. General Laws, 1913, p. 310.

53. General Laws, 1913, p. 325-327.

of Good Roads," and yet he and his law were vigorously attacked. There were two main points upon which such attacks were made. One of them was the one-mill "dragging fund" tax. Rural portions of the state fought this section vigorously, but so sound was the measure and so good were the results obtained by it that the opposition to that clause died out. A "drag will not build a permanent highway," Dunn protested in his own defense, "but it will do wonderful work for a good roadway, if it is wisely and persistently used." ⁵⁴ The other point of attack on the Dunn bill was that section which abolished the labor tax. The growth of sentiment in favor of this action had been very slow. In spite of the fact that the law permitting townships to abolish the labor tax had been in force since 1895, the highway commission had found as late as 1911 that the cash tax had replaced the labor tax in only 140 towns, while 1,084 of them still relied on statute labor. In 1914 the highway engineers throughout the state were asked to report on the sentiment of the people regarding the new road law. In a majority of the cases where the Dunn law was objected to, the chief point of attack was the clause repealing the labor tax. In Rice County opposition to the law was so strong that the farmers of the county were almost on the verge of a tax rebellion. The engineer in Rice County reported that "they seem to

54. Princeton Union, May 15, 1913.

think that the Dunn law was taking all the power away from the town boards." 55

In Fillmore County those who were opposed to the Dunn and Elwell laws organized the "Fillmore County Taxpayer's Association," and during the pre-election campaign of 1914 quizzed every candidate for a legislative office to determine whether he could be depended upon to vote for the repeal of the new road laws. Dunn was inclined to place the responsibility for this opposition on the Elwell law, and to minimize the opposition to the Dunn law. Nevertheless, he was attacked so viciously for his part in enacting the road code of 1913 that a complimentary remark about him induced him to comment, "So many brickbats have been thrown at the publisher of this paper recently by obtuse ignoramuses in connection with road legislation that he will be pardoned for parading this bouquet." 56

In other quarters the Dunn law was hailed as the "farmers' gain," and John H. Hohmann, a member of the board of county commissioners of Blue Earth County and president of the Minnesota State Automobile Association, declared that it put "all our road work on a business basis and it will, in a few years, if properly and vigorously applied, mean good roads everywhere." He gave critics

55. State Highway Commission of Minnesota, Reports, 1911, p. 41, 1914, p. 175. For reports from other counties, see p. 32-221.

56. Preston Times, July 8, October 14, 1914; Princeton Union, July 16, October 1, 15, 22, 29, 1914.

of the measure something to think about when he pointed out that seventy-eight of Minnesota's counties had an average assessed valuation of a little less than nine million dollars, and that they would on that basis contribute an average of about nine thousand dollars apiece to the state road and bridge fund which, for 1914, was estimated to yield about \$1,400,000. In return these seventy-eight counties could not receive less than one per cent of the total, or a minimum of \$14,000. In other words, the wealthiest and most populous counties were assisting the less fortunate ones to build their roads.⁵⁷ Other factors, too, tended to make opposition to the Dunn law disappear. By 1913 there were more than forty thousand automobiles registered in Minnesota, about half of which were owned by the rural population. The farmer had at last "been awakened to the fact that with good roads he can market his produce much cheaper, have easier communication with his neighbors, get to town occasionally without making a hard two days' work of it, but now 'it comes out,' he also wants Good Roads for his machine."⁵⁸

57. Sparks, vol. 1, no. 4, p. 5, no. 5, p. 7 (April, May, 1914).

58. Secretary of State, Reports, 1914, p. 4; Sparks, vol. 1, no. 2, p. 6 (February, 1914). In Sparks, vol. 3, no. 8, p. 16 (August, 1916) is published a tabulation showing the total number of cars owned in each county of the state and the number of these which were Fords. The table demonstrates that far more than half of the cars were owned in rural counties and that, on an average, about one-half of the cars in these rural areas were Fords. During 1916 an automobile club was formed by farmers in rural Otter Tail County. It was reported to be the first farmers' automobile club in the state. See Sparks, vol. 4, no. 9, p. 14 (September, 1917).

XI. THE DEVELOPMENT OF THE TRUNK HIGHWAY SYSTEM

In the designation of the third Tuesday in June of each year as "Good Roads Day," the Dunn law sought to glorify the good roads crusade, but it actually made a concession to the hard-headed group which persisted in using the labor tax to build Minnesota's roads. The idea did not prove to be popular. The first Good Roads Day was observed on June 17, 1913, but few of the communities of the state paid a great deal of attention to it. Princeton, Dunn's home town, was one of those few. On that day the people of the village built and covered with crushed rock a quarter-mile stretch of road leading into the village. Over a hundred men participated in the work, and the village council spent about \$750 for freight on the crushed rock, which was shipped from St. Cloud, and for the labor of unloading it from the freight cars. After the volunteers had worked for a day, it was necessary to hire several teams and a number of extra men to complete the work which the celebrants had begun. Dunn rather mournfully admitted that "the village of Princeton was about the only place in the state where Good Roads Day was properly observed."¹ In 1914

1. Princeton Union, May 22, June 19, July 3, 1913, June 4, 1914.

the Good Roads Day celebration at Princeton apparently was less successful than that of 1913 had been, for after the date, June 23, was past, Dunn neglected to mention it at all, even though the village council had appropriated about \$1,200 to pay the freight for crushed rock to surface one of the village streets. A few other communities observed the day, including Menahga in Wadena County and Rush City in Chisago County, where enthusiastic crowds performed on the village streets. One may suspect that, when the suggestion was made that Good Roads Day be observed the following years, the enthusiasm, which had induced men unaccustomed to hard physical work to labor on a dusty road in blistering heat, was somewhat dulled by the memories of sunburn, blisters, and lame backs. In succeeding years, the day had no greater success, and it gradually faded from public attention. It had its usefulness, however, for it marked a step in the development of a new concept of the importance of roads. ²

The Dunn law was itself but a step in this evolution. While it made adequate provision for the needs of Minnesota traffic in 1913, it failed to make allowances for the time when the number of motor vehicles on

2. Princeton Union, June 4, July 23, 1914; Sparks, vol. 1, no. 12, p. 13 (December, 1914). For a description of the celebration of Good Roads Day in North Carolina, see Cecil K. Brown, The State Highway System of North Carolina, Its Evolution and Present Status, 41 (Chapel Hill, 1931).

the roads would be greatly increased. The law failed to make provision for a connected system of state roads, which would permit travelers to pass from one part of the state to another over adequate highways, without becoming lost in a hopeless tangle of crossroads. Such a system was necessary in 1913, but it became increasingly so as the years passed by. When the law failed to set up the machinery for this important task, the motorists did the work for themselves. The blazed trail was the result.

The trail blazing movement of the second decade of the twentieth century grew independently of state or local governments, and by the end of the decade roads were marked from one end of the state to the other. Sometimes the work was performed by individuals, but more often it was carried on by associations composed of representatives from communities along the line of a proposed route. Some of the associations were commercial ventures, organized to yield a profit for those who promoted them; others were frauds perpetrated on a public which was not sophisticated enough to mistrust the promoter who promised, for a consideration of a hundred or five hundred dollars, or more, to bring the world to its doorstep. In legitimate and fraudulent schemes alike, the procedure was the same. The communities were required to pay a stipulated sum of money to defray the costs of blazing or marking a route and an annual sum

to maintain the markers. As a further consideration, they were required to improve the roads over which the trail ran. Many communities profited from their contributions to the associations; many of them, however, helplessly waited for an influx of travelers that never materialized. ³

A great many such associations were organized in Minnesota, and by 1920, along almost any country road, the insignias of the trail associations could be seen. Along many of them there were three, or four, or a half-dozen colorful emblems, representing as many trail associations, painted upon nearly every telephone pole and fence post, and even on the rocks along the way. The promoters were ingenious in designing emblems and naming routes. Minnesota had the Red Ball Route, the Black and Yellow Trail, the Clover Leaf Route, the King of Trails, the Diagonal Trail, the Chippewa Trail, the Daniel Boone Trail, the Jefferson Highway, the Mississippi Scenic Highway, the Minnesota Scenic Highway, the Yellowstone Trail, and the Glacier National Parks Highway. There were trails named for individuals such as the Bob Dunn Highway, the Theodore Roosevelt International Highway, the Nelson Trail, and the Jim Hill Highway, and there were others named for communities along the line of the road such as the M.W.A. (Mankato, Wells, and Albert

3. Sparks, vol. 8, no. 11, p. 14 (November, 1921).

Lea) Route, or the Red Wing-Mankato-Worthington Way. Many of the trails were of national importance. The Jefferson Highway, for example, started at New Orleans and terminated at Winnipeg, while the Capital National Highway led southward from St. Paul to Owatonna, where it branched into two forks, one of which led to Des Moines and the other to Chicago. The Yellowstone Trail extended from Chicago by way of the Black Hills to Yellowstone National Park, and the Burlington Way was an alternate route from New Orleans to Minneapolis, Duluth, and Port Arthur. There was almost no end to the possibilities for trail blazing, and trail promoters took full advantage of the opportunities.⁴ The automobile clubs of the state were among the most enthusiastic workers in marking trails. For miles about any town which boasted an automobile club markers of the group could be found. Country-town merchants, too, added mileage advertisements and plastered the countryside with directions for reaching the towns. The guide signs were designed to be helpful, but sometimes their very abundance served only to confuse the traveler.⁵

4. For a partial list of blazed trails in Minnesota, see Sparks, vol. 5, no. 10, p. 5-7, 20 (October, 1918).

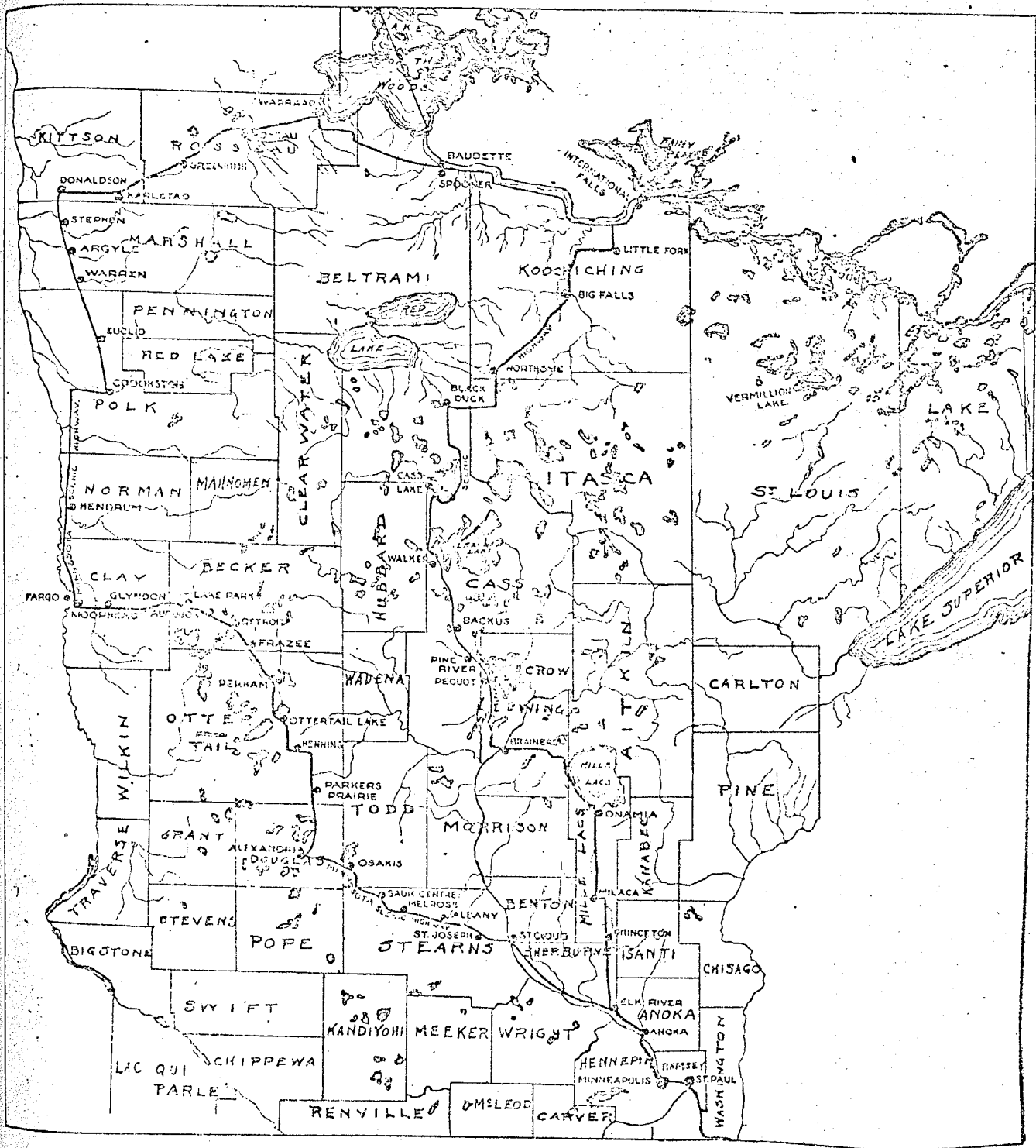
5. In every issue of Sparks for this period, there is a section entitled "Short Circuits," which relates the activities of the various automobile clubs throughout the state. To gain an appreciation of the intense activity of the local clubs in the work of trail blazing and marking, one need but thumb through the pages of this magazine.

Some of the trails were established only after long and persistent effort. Others were developed almost spontaneously by outraged communities which had angled for trail routes and then had seen the prize slip into the grasp of a neighboring rival. The Minnesota Scenic Highway, which was established in the summer of 1916 is a typical example of the evolution of a trail association. When the Jefferson Highway Association was selecting its route through northern Minnesota in 1916, three possible routes were under consideration. All followed the same course from St. Paul and Minneapolis through Anoka and Elk River. There the eastern route branched off to the north through Princeton, Mille Lacs, Brainerd, Walker, and Bemidji. The middle route followed the Mississippi River northward to Little Falls, then passed through Staples, Wadena, Park Rapids, Itasca State Park, and Bemidji, where it joined the eastern route. From Bemidji, the combined route extended to Bagley, Red Lake Falls, Thief River Falls, and on to the international boundary at St. Vincent. The western route left the Mississippi River at St. Cloud and followed up the valley of the Sauk River to Sauk Center and Alexandria. From this point it turned northward, going through Henning, Perham, and Detroit, thence to Moorhead, and up the Red River Valley through Crookston and Hallock to the boundary at St. Vincent. The committee for the

highway association chose the middle route. ⁶

Disgusted with the choice, although it must have been apparent to all the communities that some of them would have to be disappointed, the boosters for the eastern and western routes met at Detroit on August 4, 1916, and formed the Minnesota Scenic Highway Association. They laid out a trail, 1,016 miles in length, which encompassed the eastern and western routes in a grand circle of northern and western Minnesota, and made of it "the real pleasure tour of the state." The trail started at the Twin Cities and extended northward through Elk River, Princeton, Mille Lacs, Brainerd, Walker, Cass Lake, and on to the border at International Falls, turned westward along the Rainy River and Lake of the Woods to Warroad and Roseau, then followed the Red River Valley through Crookston to Moorhead, and returned to the Twin Cities by way of Glyndon, Detroit, Perham, Henning, Alexandria, Sauk Center, and St. Cloud. For an emblem the association adopted a "white star within a red circle on a blue background," and around the outer edge of the circle was printed the name of the association. The price of individual membership in the organization was set at one dollar, and an active business organization persuaded the communities which had

6. Princeton Union, May 11, 25, July 6, 20, 27, August 3, 1916; St. Paul Pioneer Press, May 21, 1916; St. Paul Dispatch, July 25, 1916; Jefferson Highway Declaration, vol. 1, no. 7, p. 7 (August, 1916).



THE ROUTE OF THE MINNESOTA SCENIC HIGHWAY
[Distributed by the Association in 1917.]

been disappointed by the Jefferson Highway Association to fulfill for the Minnesota Scenic Highway the pledges they had made to the former association. The group set out to maintain this roadway in such good condition that it would excel the roads over which the Jefferson Highway ran, refusing, in many cases, to extend its route through communities until the roads were put in good traveling condition. 7

Voluntary workers marked out a system of state highways, therefore, to satisfy the need of the traveler for clearly defined, continuous roads. It is noteworthy that for most of the distance covered by the blazed trails, state roads were utilized. It was on the occasional gaps between state roads that the local communities were persuaded to spend the money they raised to improve their roads. Through the efforts of these voluntary organizations, and the state and counties, there-

7. Princeton Union, August 10, 1916, September 20, November 29, 1917; Detroit Record, July 28, August 11, 1916; Sparks, vol. 3, no. 9, p. 12, no. 10, p. 13, no. 12, p. 10, vol. 5, no. 10, p. 5 (September, October, December, 1916, October, 1918); Minnesota Scenic Highway Association, The Minnesota Scenic Highway (St. Paul, n.d.); Articles of Incorporation and By-Laws of the Minnesota Scenic Highway Association (n.d., n.p.); Minnesota Scenic Highway Fixer, 1: 1 (August, 1920). A preliminary meeting of the association was held in St. Paul on July 24, 1916. A copy of the printed report of this meeting is to be found in the Mathias N. Koll Papers, in the possession of the Minnesota Historical Society. Koll, who lived at Cass Lake, was secretary of the association. For an example of the method used by the association to insure the maintenance of good roads, see Andrew G. Hytson to Koll, December 30, 1918, in the Koll Papers.

fore, a system of well-improved, blazed trails criss-crossed the state. The objectionable feature of the blazed trail was its unauthorized nature. Sometimes the competition between communities led to the selection of inferior routes, for in many cases the community which could promise the most money for a trail association, or could muster the most influence, won the route over the bidding of a community with better roads. Even though a trail was laid out in good faith, a disgruntled garage proprietor, whose shop was located a short distance from the chosen highway, might take advantage of darkness and the lack of regulation to paint a few markers of his own, and lead the trusting traveler over an inferior route which led past his place of business. Sentiment soon grew to favor a system of marking which would be authoritative, and the logical authority to perform this work, or to regulate it, was the highway department. In 1917, therefore, the legislature made provision for the registration of trail markers in that department. The law made it possible for the state to keep track of the rapidly increasing number of associations, and at the same time protected associations and travelers alike, for duplicate emblems were not allowed to be used.⁸

Another development which was equally important in creating an appreciation for a system of continuous

8. Sparks, vol. 5, no. 10, p. 5, 20 (October, 1916); State Highway Commission of Minnesota, Reports, 1915-16, p. 15; Laws, 1917, p. 454.

highways was the action of the federal government, during the summer of 1916, in making a general appropriation for the improvement of public roads. The idea was not new, for it was suggested in 1903, when the Brownlow-Latimer good roads bill was introduced in Congress. That bill sought to appropriate what at that time seemed like a huge sum of money -- \$24,000,000 -- for distribution among the states on the condition that they would raise a similar sum, and the joint appropriation, amounting to \$48,000,000, was to be devoted to improving the wagon roads of the nation. The distribution of the appropriation was to be based on population. ⁹

The law passed by Congress in July, 1916, was like the Brownlow-Latimer bill in principle. It was first outlined at the Federal Aid Convention in Washington, which was sponsored by the American Automobile Association, during the winter of 1912. The law provided for the appropriation of \$75,000,000 to be spread over a period of five years. It required the states to appropriate an additional sum equal to the federal appropriation, and the money was to be given to the states in

9. Congressional Record, 57 Congress, 2 session, 5; Scientific American, 88: 23 (January 10, 1903); Farm, Stock and Home, 19: 169, 203, 485, 20: 25 (April 15, May 15, December 15, 1903, January 15, 1904); North-western Agriculturist, 18: 143, 19: 112 (March 15, 1903, February 15, 1904); Ernest N. Smith, "Services of the American Automobile Association," in Clyde L. King, ed., The Automobile: Its Province and Its Problems, 271 (American Academy of Political and Social Science, Annals, vol. 116, no. 205 -- Philadelphia, 1924).

proportion to their population, area, and the mileage of rural delivery and star mail routes. In order to share in the appropriation, it was necessary for a state to establish a highway commission or department, and all funds were to be expended subject to the approval of the state authorities and the federal bureau of public roads. The bill made necessary the selection of a definite network of main highways, thus forcing the states to adopt a systematic scheme of road work. 10

In conformity with the federal requirements, the Minnesota highway commission laid out a network of highways extending to every county seat and to the larger cities in the state. When the mileage was computed, it was found that it totaled a little more than 6,200, and that it included practically all the blazed trails. On this system of roads the highway commission proposed to expend over a five-year period approximately \$4,250,000, of which about \$2,136,000 would be federal money. Minnesota's share in the appropriation amounted to a little more than \$140,000 the first year, and increased each year of the five-year period until in the last year it totaled more than \$700,000. 11

It was apparent by this time that some kind of re-

10. Statutes at Large, 39: 355-359; State Highway Commission of Minnesota, Reports, 1915-16, p. 10; Sparks, vol. 3, no. 7, p. 6, no. 12, p. 14-16, vol. 8, no. 11, p. 16 (July, December, 1916, November, 1921); Smith, in King, ed., The Automobile, 271.

11. State Highway Commission of Minnesota, Reports, 1915-16, p. 10.

organization of the highway commission was necessary. Since the adoption of the Dunn law, the work of the commission had increased tremendously, and the extension of federal aid in building roads added to the burdens that had to be borne. The state highway commission act stipulated that the body meet every two months for the transaction of essential state business, but it was impossible to complete all the business that confronted the commission at these stated meetings, and consequently a great many extra sessions were held. Charles M. Babcock, who was made chairman of the commission in 1911, was indefatigable in the performance of his duty, but he and the other commissioners devoted far more time to the work than rightfully could be asked of persons serving without compensation. The obvious solution of the problem lay in reorganizing the commission into a permanent, salaried position for one man. Such a reorganization was considered not only fairer to the men who were acting on the commission, but also conducive to greater efficiency in the administration of road affairs.

During the legislative session of 1917 this reorganization was effected, chiefly through the efforts of Robert C. Dunn. The highway commission was abandoned, and the department of highways was set up to be administered by a commissioner of highways. The new office was appointive, and the term of office was set for six years at a yearly salary of \$4,500. The new commissioner

had the power to appoint a deputy commissioner and a force of engineers and other employees, and to fix their salaries. With the state treasurer and state auditor, he was to meet in February of each year to apportion the state road and bridge fund among the counties. ¹²

It was a foregone conclusion that the new office would be offered to Charles M. Babcock. He had been active in good roads work for so many years, and had acquitted himself so well in his nonsalaried position, that most people seem to have felt that he deserved the place. Apparently the principal objection to the appointment of Babcock came from an unnamed person living in Elk River and from a number of bridge contractors who had been unable to gain special favors from the highway commission while Babcock was chairman. Governor Burnquist gave no public indication that he had made a choice until late in March. Then he tendered the position to Babcock, who accepted and entered at once upon the performance of his official duties. Dunn, who was pleased with the selection, somewhat laconically announced that "as was expected," Babcock had received the appointment, and predicted that he "will make a record that his friends will feel proud of, and that will reflect credit upon himself." ¹³

12. Laws, 1917, p. 147-169; Commissioner of Highways of Minnesota, Reports, 1917, p. 7.

13. St. Paul Pioneer Press, March 28, 1917. Perhaps the best glimpse of the events that led to the appoint-

Babcock already had determined that drastic changes in Minnesota's road system were necessary. In the report of the commission for 1915 and 1916 were recounted the results of a traffic census taken on three of the main roads of Minnesota during 1916. The census revealed that an average of about five hundred cars a day passed over these roads, and that about one-fourth of them came from outside the state. "This," Babcock concluded, "is quite significant as it shows that the travel on our roads is no longer local in nature, but is inter-state, and in a greater degree inter-county, which brings out the fact that the main highways are a State rather than a County proposition." He commended the counties for their co-operation with the commission in the construction and maintenance of these roads, but he pointed out that the rapidly growing amount of travel increased the costs of maintenance to such an extent that it soon would be "necessary to provide for some additional means of keeping such roads in condition." He continued:

It is considered by many that this may be accomplished by means of an extra tax on automobiles, the proceeds from which should be used for the upkeep of the main arterial highways. This would be a fair proposition, for traffic records prove that it costs the Counties in extra maintenance on gravel roads, approximately, one-half cent for each mile that an automobile travels.¹⁴

ment of Babcock are afforded by a few brief paragraphs that Dunn published in the Princeton Union for March 8, 22, and April 5, 1917. See also the issue for November 7, 1918, and the Sherburne County Star News (Elk River), April 5, 1917.

14. State Highway Commission of Minnesota, Reports, 1915-16, p. 7, 8. To gain an idea of the interstate

A year later, he repeated this idea in stronger language.

Motor vehicles are causing a great deal of additional expense in the construction and maintenance of the public highways and are not bearing their full share of the cost. I submit to you that motor vehicles should pay a license fee of a sufficient amount to largely care for the upkeep of the main lines of traffic. This is only fair to all interests of the state, and it is a policy which has been adopted by practically all of the other states in the union. ¹⁵

The idea of the increased license fee was not a new one, for as early as 1908 the highway commission in its report had suggested an annual tax on automobiles of ten dollars, the proceeds of which were to be turned over to the commission and used for the maintenance of state roads. In 1913 Dunn had introduced a bill to increase the license fees from a dollar and a half for a three-year period to five dollars a year, and had seen the House adopt the measure by a substantial vote, only to have it killed in the Senate. In 1915 the fee was raised to five dollars for a three-year period, but in 1917 a bill again calling for a five dollar a year

nature of automobile traffic over Minnesota roads during this decade, one has only to glance through the voluminous correspondence carried on by Koll. In addition to being secretary of the Minnesota Scenic Highway Association, Koll was president of the Minnesota division of the Theodore Roosevelt International Highway Association, secretary of the Cass Lake Commercial Club, and an officer of the Northern Minnesota Development Association. Literally hundreds of requests for information regarding road and summer resort facilities are filed among his papers for the period from 1916 through 1920.

15. Commissioner of Highways of Minnesota, Reports, 1917, p. 6.

charge was lost. In all cases, the proponents of the measures had to combat the opposition of the automobile clubs, for the automobile association maintained a vigilant lobby at the capitol during every legislative session to "see that no unjust laws affecting automobile owners were passed, and that needed legislation for their benefit was enacted." 16

When America entered the World War in 1917, wartime activities were stressed almost to the exclusion of all others. To expedite the shipment of war supplies and foodstuffs for the army, the railroads neglected the ordinary commercial activities to such an extent that it became almost impossible for shippers to obtain freight cars for ordinary freight transportation. In this emergency the automobile was called into service. To relieve the strain on the overcrowded railroads, people were urged to ship by trucks whenever it was possible to do so, and while they were asked to conserve gasoline, they also were encouraged to travel by automobile rather than by train. Under the pressure of such circumstances, there was justification in the often repeated command to Americans to "help win the war by improving your

16. Ante, p. 414; State Highway Commission of Minnesota, Reports, 1908, p. 3; Sparks, vol. 4, no. 1, p. 8, no. 2, p. 8, no. 3, p. 8, no. 4, p. 8, 9 (January, February, March, April, 1917); Princeton Union, April 26, 1917; House Journal, 1913, p. 68, 449, 848, 883, 1917, p. 444, 521, 1088; Senate Journal, 1913, p. 866, 936, 951; Automobile Club of Saint Paul, Year Books, 1921, p. 7.

roads." 17

Babcock was bothered by the extraordinary increase in automobile traffic during the war years. In the fall of 1917 the highway department again took a census of traffic over a number of the more important highways in the state, and found that during the two years since the last census was taken, the number of vehicles had increased tremendously. In 1917 state highway number 1, in Dakota County, more popularly known as the Jefferson Highway, which two years earlier had borne an average daily traffic of less than five hundred vehicles, was found to be burdened with a traffic load of more than eleven hundred vehicles. Trucks, which in the earlier census had averaged only two a day, averaged eleven in 1917. In 1919 the traffic over a number of the most heavily traveled state roads averaged more than a thousand vehicles a day, fifteen of which were trucks. The proportion of motor vehicles to those drawn by horses showed a constant increase during these years, and in 1919 the motor vehicles on these heavily traveled roads constituted almost 99 per cent of the whole volume of travel over them. For the state as a

17. Commissioner of Highways of Minnesota, Reports, 1918-19, p. 5; St. Paul Pioneer Press, May 5, August 4, 11, 1918; Sparks, vol. 4, no. 4, p. 5, no. 5, p. 15, no. 6, p. 5, no. 7, p. 13, no. 9, p. 9, no. 12, p. 10, vol. 5, no. 1, p. 10, no. 7, p. 7 (April, May, June, July, September, December, 1917, January, July, 1918); Franklin F. Holbrook and Livia Appel, Minnesota in the War with Germany, 2: 184-186, 229-234 (St. Paul, 1932).

whole, Babcock estimated, the motor vehicles accounted for 92 per cent of the average traffic. An astounding change had occurred in the character of transportation in Minnesota during a few brief years. ¹⁸

The constant pounding of swiftly moving automobiles and heavy trucks on the gravel-surfaced roads of Minnesota made the cost of maintenance almost prohibitive to the local units of government. The increasing number of automobile trucks, in particular, gave Babcock cause for alarm, for to him it was obvious that the "freight carrying business of commerce" was "developing into a motor truck service," and he visioned a time when both the number and size of trucks would increase still further. The growth of the automobile industry had given rise to still another complicating factor, for inevitably the motor vehicle had developed into a passenger carrier. ¹⁹

Just when and where in Minnesota the automobile was first adapted to the transportation of passengers from one town to another on a regular time schedule and at regular rates is not definitely known. One version of the story of the development of automobile bus transportation gives the credit for originating this kind of service to two young men from Hibbing, who, in the

18. Sparks, vol. 4, no. 10, p. 9 (October, 1917); Commissioner of Highways of Minnesota, Reports, 1918-19, p. 5; St. Paul Pioneer Press, August 11, 1918.

19. Wadena Pioneer Journal, February 6, 1919.

summer of 1914, were said to have begun carrying passengers between Hibbing and near-by mining locations. In 1915 they extended their line to Nashwauk, and a short time later, to Grand Rapids. Out of this venture is said to have developed the Mesabe Transportation Company, which was organized on January 1, 1916.²⁰ It is certain that the passenger transportation business had its roots in some very similar circumstance. As early as June, 1914, a grocer in Hibbing found it profitable to deliver passengers as well as groceries to the summer resort colony at Sturgeon Lake, a short distance north of Hibbing. A month later another grocer at Hibbing purchased a seven-passenger Packard for use as a passenger bus between Hibbing and the near-by town of Kelly Lake, passing enroute through Harold Location, a mining center, and Carson Lake. These two men established a regular transportation service over the routes they traveled. There also is evidence that the star or rural route mail carriers, traveling through country which was not accessible by train, carried passengers bound for inland communities. It is probable that the development of this kind of transportation service in the

20. L. A. Rossman, "A Romance of Transportation," 1, an abstract in manuscript form of an address delivered before the Traffic Club of Minneapolis, February 25, 1937; Le Roy Wilkerson, "History of the Mesabe Transportation Company," a paper in manuscript form read at a meeting of the St. Louis County Historical Society in 1930. Copies of these manuscripts are in the possession of the Minnesota Historical Society. See also the Minneapolis Star, February 25, 1937.

northern part of Minnesota was duplicated in many other communities of the state. At all events, by 1918 there were several such bus lines in operation, and their heavy vehicles rumbled over Minnesota's roads in ever-increasing numbers. 21

It was these aspects of the transportation problem that made Babcock feel the urgency of road reform. Some means had to be provided to make the main roads of Minnesota -- those which connected the centers of population -- "365-Day Roads," capable of sustaining the heavy traffic which was moving over them. He saw the need of making such roads of concrete, asphalt, or some other material suitable to the traffic they bore, and he sought to finance that work without depriving the rest of the road system of its financial support. 22

Babcock took as the basis for his system of main or trunk highways the system selected in 1916 to receive federal aid, and he proposed that the license fee for automobiles should be increased sufficiently to defray the expense involved. He admitted that the work could be done on a cash basis by construct-

21. Mesabe Ore (Hibbing), June 6, July 11, 1914, March 8, 1916; Bear River Journal, September 11, 1913; Wadena Pioneer Journal, February 6, March 27, 1919.

22. Babcock first announced his plan for a trunk highway system in a series of four articles published in the St. Paul Pioneer Press for July 21 and 28, and August 4 and 11, 1918. See also the Pioneer Press, January 23, 1919; E. T. Winship, "Six Thousand Miles of Hard-Surfaced Roads for Minnesota," in Sparks, vol. 5, no. 12, p. 5 (December, 1918).

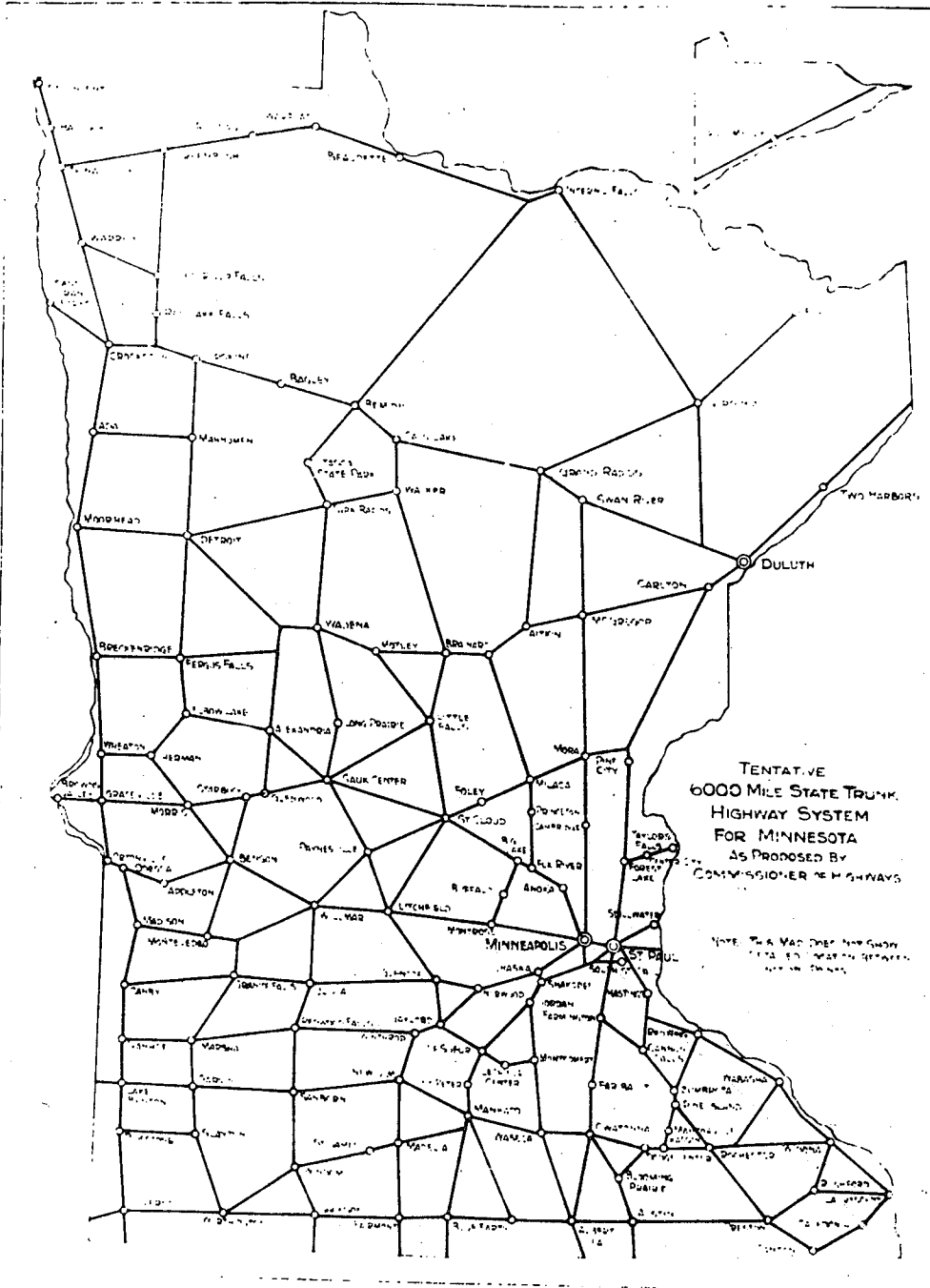


DIAGRAM OF THE TRUNK HIGHWAY SYSTEM
[From Sparks, vol. 5, no. 12, p. 7 (December, 1918).]

ing only so much roadway as there were funds to finance in any given year, but, he held, such a system would mean that many portions of the state would have to be without adequate roads for many years. As a substitute, therefore, he proposed that the state should issue bonds to finance an extensive program of road construction immediately. The bonds were to be paid, as they came due, from the proceeds of the automobile license tax. ²³

Two potential sources of opposition to any such program of road improvement had to be overcome before the plan stood any chance of success. The rural areas always had obstructed any scheme involving the issuance of bonds. Babcock's plan placated those areas by assuring them that they would continue to receive the state aid which they had received in the past. The Babcock plan, in effect, increased this aid, for the road system which would be improved under the new plan had been a part of the state road system, receiving state aid. Under the Babcock plan, these roads would be removed from the state-aid system, and the funds which had been spent on improving and maintaining them could be used on other roads. The rural areas, therefore, would gain additional financial aid from the new plan. ²⁴ For a

23. St. Paul Pioneer Press, July 21, 1918; Winship, in Sparks, vol. 5, no. 12, p. 5-8.

24. Sparks, vol. 6, no. 1, p. 9 (January, 1919). The highway engineer in Hubbard County demonstrated that the adoption of the amendment would result in shifting to the trunk highway system 120 miles of the total of 137 miles

short time late in 1918, the Nonpartisan League sought to stir up opposition to the plan among the farmers. A sharply controversial article in the Minnesota Leader, the organ of the party, asserted that the Babcock plan would operate adversely to the interests of the farmers. Babcock, however, made a frank appeal, through the columns of the Leader, to keep the road problem out of politics, and carefully explained the benefits that would accrue to the farming districts because of the increased amount of state aid that would be available for the improvement of secondary, or farm to market, roads. He thereby removed a strong threat to the success of the plan, and, although the Nonpartisan League tried to make its support of the measure contingent on the adoption of a league plan for the construction of a state-owned terminal elevator, its members were said to have been ardently in favor of the plan. ²⁵

The principal source of objection came from the automobile owners of the state. They had fought consistently any attempt to increase the license fee, and their lobbies had been active at every session of the legislature. They were committed to the program of

of state roads in the county, thereby making available for the improvement of 17 miles of roads the sum which formerly had been expended annually on 137 miles. He asked: "Do you want the Babcock road law?" And he concluded, "I do." See the Wadena Pioneer Journal, October 30, 1919.

25. Minnesota Leader (St. Paul), December 21, 28, 1918, January 4, 1919; St. Paul Dispatch, October 10, 1920.

good roads, and even of hard-surfaced roads, but they objected to bearing the cost of the improvement themselves. The opinion of the Minnesota State Automobile Association, expressed in an editorial in the official publication of the association in November, 1918, was decidedly opposed to the idea. To the question: "Shall Motorists Pay for the Roads?" the editorial answered:

Decidedly not. If it were not a real menace it would be amusing to note the enthusiasm with which some of our non-motorist friends are encouraging the issuing of bonds for road building, said bonds to be paid for by taxes imposed upon the motorist. . . . Any man with an ounce of sense knows, no matter what he says, that it is no more the business of the motorist to build roads, which benefits everybody alike, than it is for those with children to build and pay for all the school houses or the man whose business requires police protection to pay for the upkeep of the police department. . . . Of course the motorist would be willing to pay a larger tax on his machine, to be used for road construction, besides the federal tax that is about to be imposed and the personal tax he always has to pay, IF they cannot be built otherwise. However, they can and must be built otherwise, at least in part, as the motorist is not going to consent to a big increase in his annual automobile tax. He is willing to listen to reason . . . but when you put it up to him to build all of the main traveled roads in the state, he is going to rebel and he has every right to do so. 26

The objections of the automobile owners to the Babcock plan were overcome by an appeal to their pocket-books. They were convinced by statistical evidence that automobile tires, which normally wore out after they had been run an average of 3,500 miles, reasonably could be expected to last for at least 10,000 miles on

26. Automobile Club of Saint Paul, Year Books, 1921, p. 7; Sparks, vol. 5, no. 11, p. 12 (November, 1918).

hard-surfaced roads. They were shown that they would be able to drive their cars considerably farther on a gallon of gasoline over hard-surfaced roads than on dirt and gravel roads, and they were shown that the depreciation and costs of repairs would be materially reduced by the substitution of paved roads for gravel roads. When the agreement was reached to remove the automobile from the state and county tax lists, and levy the increased license fee in lieu of all other state and county taxation, the Minnesota State Automobile Association announced that it was "about ready to waive all . . . contentions, and in line with the recommendations of Mr. Babcock," it was "willing to support a raise in the annual license fee for automobiles." In view of the advantages which good roads offered the drivers of automobiles, and their own consistent agitation for improved roads, the automobile clubs could not withhold that approval, even though it meant that the taxation would be on "a more onerous basis than other personal property." 27

It was necessary to obtain a constitutional amendment to put this program into effect, for the state constitution forbade the state to engage in works of internal improvement, and road building on the scale that Babcock

27. St. Paul Pioneer Press, July 21, 28, August 4, 1918; Sparks, vol. 5, no. 9, p. 5, vol. 6, no. 1, p. 9, 12 (September, 1918, January, 1919); Kumm, Constitution of Minnesota, 228.

contemplated certainly was internal improvement. It is true that the state had adopted amendments which enabled it to set up a state road and bridge fund, and, through this fund, to distribute financial aid to the counties. But the road and bridge amendments in nowise abridged the constitutional prohibition of the state from entering into the business of road building; they simply granted it the permission to give financial support to the counties who were engaged in that work. Undaunted by the difficulty of persuading a sufficient number of voters to ballot on a constitutional amendment, Babcock determined to press the question of good roads in the legislative session of 1919. He already had the support of numerous civic groups, and, even before the legislative session opened, he had the verbal assurance of a large number of legislators that they would favor his program. 28

In his inaugural address in January, 1919, Governor Burnquist invited the legislature to consider the Babcock plan, stressing the importance of good roads in modern life, and urging upon that body the necessity for inaugurating a program of permanent road construction. To this end, he suggested that the legislature draw up a constitutional amendment to be submitted to the people at the next general election. The legislature acted upon

28. Anderson and Lobb, History of the Constitution of Minnesota, 194; Sparks, vol. 6, no. 1, p. 10 (January, 1919).

this suggestion, and by the middle of January both houses were ready to consider the Babcock plan. Within a month, the document had been signed by the governor. The top-heavy vote by which both houses accepted the plan is an indication of the popularity in the legislature of the good roads movement. In the Senate the vote on the law authorizing the amendment was 58 to 3, and in the House it was 118 to 7.²⁹

Undoubtedly, the legislation which at that time was being rushed through Congress had some effect upon the legislature. The bill providing additional federal aid for road building in the states stipulated that if the money set aside for states which constitutionally were unable to appropriate funds for internal improvements, and hence could not raise funds to match the federal aid, was unused after two years, it should be withdrawn and redistributed among the states which imposed no such restrictions. The legislature of Minnesota constitutionally could not appropriate funds for roads, and because it could impose only a one-mill tax, the distribution of which was controlled by the constitution, the state would be unable to take advantage of the federal aid. Senators Frank B. Kellogg and Knute Nelson, however, successfully led a movement to set aside the arbitrary revocation of the federal grants, and sub-

29. J. A. A. Burnquist, Inaugural Message, 1919, p. 13; Laws, 1919, p. 737-752; Senate Journal, 1919, p. 343; House Journal, 1919, p. 447.

stituted a provision that the funds should be held until the states had had an opportunity to amend their constitutions. At the same time, they were to be permitted to claim as much of the federal aid as their constitutions allowed. Nevertheless, Minnesota was in a poor position to realize the benefits of the federal aid unless the constitution was amended to permit the use of more money for roads. The federal appropriation measure of 1919, therefore, was an inducement to legislators to support the amendment, for in every legislative district federal aid road projects were under way, and because of the popularity of the work, few of them cared to obstruct it. 30

The amendment which was submitted for popular vote at the election of 1920 has been described as a remarkable document. For one thing, it is the only amendment which has added a new article to the Minnesota constitution. Furthermore, it did not ask a complete revocation of the prohibition of the state to engage in works of internal improvement. It gave the state permission only to build specified roads and bridges, and left untouched the road and bridge amendment, for the two provisions supplemented one another. Almost all other constitution-

30. Congressional Record, 65 Congress, 3 session, 2191, 2801-2808; Statutes at Large, 40: 1200; St. Paul Pioneer Press, January 28, 1919; Charles M. Babcock and John H. Mullen, State Trunk Highway System, 7 (n.p., 1920).

al amendments have been brief in form; the trunk highways amendment added more to the length of the constitution "than all the other amendments from 1858 to 1920 combined." Most amendments have been general in their terms; the trunk highways amendment specified in detail the routes of seventy trunk highways leading to every county seat in the state, "which shall be located, constructed, reconstructed, improved and forever maintained as public highways by the state of Minnesota." If a county seat was changed, the legislature was authorized to provide trunk highway connections with the new seat, and, when the contemplated program was seventy-five per cent complete, the addition to the system of more trunk highways was to be permitted provided that funds were available. The amendment created two funds, the one called the trunk highway fund, to be used for financing the construction and upkeep of the system, and the other termed the trunk highway sinking fund, the proceeds of which were to be used to retire the trunk highway bonds. The funds were to be derived from the sale of state bonds, which were to bear not more than five per cent interest, and were to mature in not less than twenty years. If the sinking fund was not adequate to meet the bonds when due, a general tax was to be levied on property to meet the deficiency, or an appropriation for that purpose was to be made. The amount of bonds issued in any one calendar year by legislative action could not exceed

ten million dollars, and the total amount of unpaid bonds at any one time was never to exceed seventy-five million dollars. The sinking fund was to be made up from the income derived from taxing motor vehicles, but such taxation was to be in lieu of all other taxation of motor vehicles for state and county purposes, although cities and villages were to be permitted to levy wheelage taxes. ³¹

The unusual length of the amendment has been explained on the ground that the legislature of 1919 wished to avoid the possibility that the trunk highway system might constitute a "pork barrel" for future legislatures. It seems equally logical to suggest that the routes were specified to win public favor for the measure. A community which knew in advance that it was to be located on an important trunk highway was far more likely to give the amendment a large affirmative vote than would be the case if the amendment were couched in more general terms. It was also a positive guarantee that the trunk highways would be located where the highway department had determined they would be most useful, and also where the federal aid could be applied. ³²

Section two of the constitutional amendment, which provided for the creation of the trunk highway sinking

31. Laws, 1919, p. 737-752; Anderson and Lobb, History of the Constitution of Minnesota, 201-203.

32. Folwell, Minnesota, 3: 310.

fund, contained a provision that the fund might be used when "duly authorized by legislative enactment to reimburse any county for the money expended by it subsequent to February 1st, 1919, in permanently improving any road hereinbefore specifically described, in accordance with plans and specifications therefor approved by the commissioner of highways." The 1919 session of the legislature authorized counties to issue bonds for construction work on state roads upon which the commissioner of highways apportioned federal aid. Such work was to be of a permanent nature -- either paving, or work preparatory to paving -- and was to be approved by the commissioner of highways. The county commissioners could issue such bonds in amounts not exceeding \$125,000 upon a four-fifths vote of the commissioners. When the amount exceeded \$125,000 but was less than \$250,000, the unanimous approval of the county board was required, but for amounts in excess of \$250,000, a majority vote of the people was necessary. 33

The ostensible reason for the passage of the law was the necessity of raising funds to match federal appropriations, and in 1919 more than \$425,000 of federal funds were available for the improvement of roads under the provisions of the act of 1916 alone, while the 1919 measure, if it could be made to apply in Minnesota, would release almost a million and a half more. The passage

of this law, however, also gave the advocates of the Babcock plan a strong argument for its adoption. "Those of us who had much to do with the campaign for the Amendment," commented the editor of Sparks, "know full well that one of the chief arguments used for the passage of the Amendment was the refundment to the counties who had gone ahead under the supposition, which amounted to a promise, that they would be reimbursed for every cent they had spent upon a state highway." That the argument was potent both in inducing the counties to issue bonds and in gaining favorable votes is attested by the success of the amendment in the election of 1920, and by the fact that in 1921 alone the state assumed about \$13,000,000 in bonds issued under the terms of this act. 34

34. Commissioner of Highways of Minnesota, Reports, 1922, p. 33-35, 41; Sparks, vol. 8, no. 3, p. 12 (March, 1921). As an example of the use of the bond issue as a means of swinging votes in favor of the amendment may be cited an editorial in the Wadena Pioneer Journal for March 13, 1919, in which Babcock is quoted as urging the counties to issue bonds as a means of hurrying co-ordinated and intelligent road construction and to secure for the state its share of the federal aid. The editorial continued with a declaration that if the bonds were issued, the state would assume them if the amendment was adopted, and all that it would cost the county would be the interest on the bonds until such time as the state assumed the obligation. See also Wadena Pioneer Journal, May 1, 1919; Koll to I. W. Lee of Duluth, June 29, 1919, in the Koll Papers. Lee was secretary of the Theodore Roosevelt International Highway Association, which crossed Minnesota from Duluth to East Grand Forks. Koll suggested that the highway association urge the counties to issue bonds under the terms of the "act which supplements the Trunk Line Highway constitutional amendment act."

Almost before the legislature had taken steps to draw up the amendment, the friends of the measure had gone into action. The Northern Minnesota Editorial Association assembled at Wadena for its winter session late in January, 1919, and it was at this meeting of newspapermen that the publicity campaign for the trunk highways amendment was formally opened. In a series of addresses, Babcock, John H. Mullen, the chief engineer, and Senator Patrick H. McGarry of Walker outlined the proposed amendment and explained the necessity for it. It is noteworthy that that association adopted a formal resolution approving the plan, thus assuring its supporters an invaluable ally. ³⁵

The automobile clubs of the state enthusiastically backed the project, and, indeed, claimed no small share of the credit for its origin. Urging the member clubs of the state association to support the amendment, the editor of Sparks said, "It is to rejoice. After twelve years of consistent boosting for the good roads cause it seems now that the members of the Minnesota State Automobile Association are about to have their efforts rewarded." In March, 1919, the state headquarters for the association asked each member club to appoint a publicity chairman, and, at the same time, the highway department announced that it was preparing a series of

35. Wadena Pioneer Journal, January 23, 30, February 6, 1919; St. Paul Pioneer Press, January 25, 1919.

talks and illustrated lectures which would be sent wherever they were wanted. ³⁶

In April, 1919, the Minnesota Highway Improvement Association was organized to carry on a campaign of education in favor of the amendment. It sought to "affiliate all the commercial clubs, auto clubs and other civic organizations" in a systematic campaign in behalf of the amendment. Senator McGarry was president of the group, and among the eleven members of the board of directors were John H. Hohmann of Mankato, for several years president of the state automobile association, Ernest T. Winship of Owatonna, president of the automobile association at the time, and Oscar Swenson, a member of the House of Representatives from Nicollet County. Harry G. Davis, secretary to Babcock, resigned his position in the highway department to become secretary of the new organization, and William E. Verity, editor of the Wadena Pioneer Journal, was the business manager. The Minnesota Highway Improvement Association sponsored the formation of county and township highway improvement associations, and retained a battery of speakers to carry on the campaign. For its support, the association relied upon contributions of interested groups, and the financial support it received in response to urgent appeals to automobile clubs, commercial organi-

36. Sparks, vol. 6, no. 2, p. 12, no. 3, p. 13 (February, March, 1919).

zations, and volunteer groups throughout the state, was sufficient to permit it to carry on in unstinted fashion. ³⁷

The Highway Improvement Association was a highly specialized organization, and roused the people to an extraordinary interest in the movement. "The Babcock Plan, Roads for All Loads," became a familiar slogan. In April, 1920, the association sponsored a good roads meeting for county commissioners and county auditors at St. Paul and Minneapolis. The proceedings of the convention, which was successful in gaining the support of county officials, were printed and widely distributed by the association. ³⁸ To popularize the amendment, numerous other leaflets and broadsides were issued,

37. Sparks, vol. 6, no. 8, p. 12 (August, 1919); Wadena Pioneer Journal, April 17, 1919; St. Paul Dispatch, October 2, 1919; St. Paul Pioneer Press, October 24, 1920. The officers of the Minnesota Highway Improvement Association are listed on the letterhead of the association. See Leonard H. Nord, secretary, to Koll, February 16, 1920, in Koll Papers. This letter contains an urgent appeal for funds to support the association's program, and asks for a volunteer contribution of \$1,500 from Cass County. The Portland cement industry contributed the sum of \$7,500 to the organization. Considerable protest was raised against this contribution, and as a result the Minnesota Highway Improvement Association was reorganized in October, 1919. Davis and Verity retired and were succeeded by Nord as secretary, and John H. Hohmann as business manager. The organization was incorporated at this time. See Wadena Pioneer Journal, October 9, 1919; St. Paul Dispatch, October 2, 10, 1919.

38. Minnesota Highway Improvement Association, Proceedings of the Good Roads Convention of County Commissioners and Auditors, St. Paul and Minneapolis, Minnesota, April 8th and 9th, 1920.

billboards were plastered with advertisements, newspapers gave freely of their space, women's good roads clubs were formed, Boy Scouts were called upon to distribute literature, and every form of propaganda that the war had called into service was employed to make the campaign a success. As the campaign was drawing to a close, noonday meetings were held in factories, speeches were "made at auction sales, picnics, threshing rigs, and, in fact, wherever gatherings were found," and even ministers pleaded from the pulpit with their congregations to vote for the Babcock plan. The day before the election a monster parade was staged in Minneapolis and St. Paul to remind voters to get out and vote, and newspapers displayed full-page advertisements advising readers that "Its now or never! Pull Minnesota out of the Mud." The campaign was described as the "most intensive . . . yet conducted in favor of any special legislation," and on the eve of election it scarcely was a question of getting enough voters to vote, but rather one of how large a majority could be piled up. When the votes were counted, it was found that the amendment had been adopted by the largest vote and the largest majority that had ever been accorded an amendment -- 526,936 persons voted in favor of its adoption, and 199,603 voted against it. ³⁹

39. Folwell, Minnesota, 3: 310; Anderson and Lobb, History of the Constitution of Minnesota, 201-203; St. Paul Pioneer Press, October 10, 24, 25, 29, 30, 31,

After this sweeping endorsement of the good roads program, little difficulty was anticipated in passing the legislation to put the trunk highways amendment into effect. Shortly after the election, however, a wide rift appeared in the ranks of the leaders of the movement over the question of how the huge fund created by the amendment was to be administered, and the Minnesota Highway Improvement Association was divided into two widely separated groups. One faction, headed by Senator McGarry and W. F. Brooks of Minneapolis, sought to place the management of the highway department in the hands of a commission, on the grounds that the project was too large to entrust to one man. The Babcock plan, one of the proponents of a commission form of organization pointed out at the preliminary meeting on December 21 to consider legislation, "confers unlimited powers in the hiring and firing of men, unlimited power in the control of money, and too much power in the letting of contracts." ⁴⁰ The second group, headed by Babcock,

1920; Brown County Journal (New Ulm), June 12, 1920; Cass County Pioneer (Walker), October 22, 1920; Minneapolis Journal, November 1, 3, 4, 1920; Koll to M. B. Elson, October 25, 1920, and Koll to A. J. Wright, November 29, 1920, in the Koll Papers.

40. Sparks, vol. 8, no. 1, p. 14 (January, 1921); St. Paul Dispatch, December 9, 1920; St. Paul Pioneer Press, December 22, 1920. The Dispatch and the Pioneer Press conducted a survey of the form of organization in other states, the results of which were published in the Dispatch for December 27, 28, 30, 31, 1920, January 1, 3, 4, 5, 6, 7, 8, 10, 1921. Although the papers disclaimed any desire to influence public opinion, they favored the commission form of organization in opposition to the

his chief engineer, John H. Mullen, and Senator Leonard Nord of International Falls, favored the retention of a one-man form of organization. The sponsors of the commissioner theory felt that the department thus could be kept free of politics, that the responsibility for an honest administration of highway matters more readily could be placed on one man than on a commission composed of three or more men, and above all else, those who adhered to a one-man form of organization did so because they had Charles M. Babcock to take over the work during the critical, early years. The split did not reach a point where the different groups were "calling each other names," but a critical situation was created, and infinite tact was required to prevent a bitter fight from developing. 41

The honest supporters of both forms of organization were many, but even before the legislature met, it

commissioner form. See also the Pioneer Press for January 2, 3, 9, 11, 1921, for the registration of opinions in favor of the commission form of organization by different groups in the state. The Minnesota Scenic Highway Association at first favored the commission form of organization, according to a letter dated November 24, 1920, from Charles R. Middleton, chairman of the organization's legislative committee, to Koll. The letter is in the Koll Papers.

41. Sparks, vol. 8, no. 1, p. 14 (January, 1921); St. Paul Dispatch, December 9, 21, 1920; St. Paul Pioneer Press, December 22, 1920; Middleton to Koll, January 3, 1921, in the Koll Papers. In this letter, written from St. Paul, Middleton discussed the difference of opinion about the organization of the highway department, and showed that his own ideas then leaned toward the commissioner form of organization.

was evident that the commissioner form of organization was the one which met with the approval of the majority in both houses. Babcock's own preference probably had some influence in determining the outcome, but it also must be remembered that Minnesota, only four years earlier, had discarded as outmoded and inefficient a commission form of administration.⁴² The highway measure, which was introduced in the House as House File number 535, provided for the administration of the highway department by a single commissioner, and an attempt by Representative Theodore Christianson to amend the bill by setting up a "Highway Advisory Board," composed of the governor, secretary of state, and attorney general, with broad restrictive powers in the letting of contracts, was voted down by a large majority. In the Senate, a similar attempt to modify the measure was made by Senator McGarry, one of the strongest proponents of the amendment. He proposed to vest the administration of the highway department in a commission of three men. They were not to be an unsalaried body like the commission which administered highway affairs in Minnesota from 1906 to 1917, but each member would receive an annual salary of \$6,000. Like the Christianson amendment in the House, the McGarry proposal went

42. Ante, p. 438-440; St. Paul Dispatch, December 21, 1920, January 7, 11, 1921; Middleton to Koll, January 3, 1921, in the Koll Papers.

down to defeat. The Minnesota highway department was to be administered by a single commissioner, appointed by the governor for a two-year term, at an annual salary of \$6,000. ⁴³

The legislation, over which this battle was fought, became the comprehensive "Public Highways Act of Minnesota," a chapter of fifty-nine pages. The new code retained the principles of the Dunn law, but accommodated them to the changes implied in the new amendment. There were now four classes of roads. First, were the common town roads -- roads and cartways laid out and maintained solely by the townships, although the county boards could furnish aid to the townships. Second, were county roads. These were roads passing through more than one township in a county, laid out and constructed by the county, but maintained by the towns through which they passed. Third, were state-aid roads, which were county roads designated to receive aid from the state road and bridge fund. They were constructed, improved, and maintained by the counties under rules and regulations promulgated by the commissioner of highways. Lastly, was the trunk highway system, a network of roads

43. House Journal, 1921, p. 427; Senate Journal, 1921, p. 766, 787; Laws, 1921, p. 408; Middleton to Koll, March 25, 1921, in the Koll Papers. McGarry earlier had favored a commission of five or more members. See the St. Paul Dispatch, December 21, 1920.

located, constructed, improved, and maintained by the state. Neither counties nor townships had any jurisdiction over the trunk highways; they were the peculiar responsibility of the state. The lesson taught by the trail associations was remembered, for the law provided that the trunk highways should be marked or blazed distinctively. ⁴⁴

The public highways act made compulsory the employment by the counties of a county highway engineer, and provided that he might be selected from a list of persons submitted by the commissioner of highways, although it did not make a choice from this list compulsory. Thus was achieved another of the aims of the good roads advocates. The law passed by the legislature in 1907 to permit the employment of county superintendents of highways had been declared unconstitutional, as has been pointed out, because it exempted from its provision the three principal counties of the state, and no substitute was passed in spite of repeated urgings by the highway commission. In 1911 the problem of extending skilled supervision of local road work was solved in part by the expansion of the activities of the highway commission, and the employment of additional highway engineers who were authorized to assist the counties and townships. The public

44. Laws, 1921, p. 406-464; Sparks, vol. 8, no. 1, p. 14 (January, 1921).

highways act, however, made the office of county highway engineer an actuality. ⁴⁵

The funds for financing the program of work outlined in the constitutional amendment were to be raised by a tax upon motor vehicles. It was noticeable, at the beginning of Babcock's campaign to win public favor for his plan, that the old idea cropped out of assessing the cost of improvements, or a part of it, against property benefitting from the construction of the roads. Many people, indeed, favored the revival of the old Elwell law. ⁴⁶ Others favored a bond issue to be redeemed by a general tax; while the majority of people, who knew only that they wanted good roads, hoped that a "just and equitable system" would be adopted. ⁴⁷ By the time the legislature had drawn up the amendment, however, Babcock's plan of raising funds through an increased license fee was generally accepted, and the campaign for the ratification of the trunk highways amendment was waged on the supposition that an average annual license fee of not more than eighteen dollars

45. Laws, 1921, p. 428.

46. A letter from Martin Widsten of Warroad to Koll on December 31, 1918, sums up this attitude toward the improvement of the roads and suggests reviving the Elwell law. This letter is in the Koll Papers. See also ante, p. 417-419.

47. G. A. Kortsch to Koll, January 13, 1919. Kortsch in 1919 was chairman of the legislative committee on roads and transportation of the Minnesota Scenic Highway Association. See also the St. Paul Pioneer Press, January 5, 1919.

would be assessed. 48

When the legislature met in 1921, therefore, it was concerned chiefly with the question of calculating the amount of the license fee to be assessed, and of determining the basis for assessing it. Since the license fee was to be charged in lieu of all other state and county taxation, it was agreed that it at least should be equal to the personal property taxes previously levied on motor vehicles by county and state governments. The amendment, indeed, provided for taxation at a rate even greater than that total. At the same time that the legislators were wrestling with the problem of determining a tax basis high enough to produce the needed revenue, however, they also were confronted with a barrage of personal appeals and newspaper editorials to remind them of the campaign promises not to make the fees too high. A number of plans were advocated for determining the basis upon which the fee should be assessed. Fees based upon value, weight, power developed by the motor, and upon combinations of these three plans were advanced with varying degrees of support. 49 Most of the plans were too complicated to be

48. St. Paul Pioneer Press, February 5, 1919; St. Paul Dispatch, December 22, 1920; Sparks, vol. 7, no. 12, p. 13, vol. 8, no. 2, p. 12 (December, 1920, February, 1921).

49. St. Paul Pioneer Press, January 17, 19, 1919; St. Paul Dispatch, December 31, 1920, January 25, 1921; Sparks, vol. 7, no. 12, p. 13, vol. 8, no. 1, p. 16, no. 2, p. 16, no. 4, p. 16 (December, 1920, January, February, April, 1921).

practicable, and simplicity was a requisite of a smoothly working plan. The early suggestions, moreover, were based upon a fee rate which many people believed to be prohibitively high. The committee which met in December to consider legislation, for example, prepared a bill which would tax the lowest priced car at a rate of \$23.60 per year, while the most expensive car would be required to pay a fee of almost \$140. ⁵⁰

The motor vehicle license measure, as finally passed, provided for the sale of licenses based upon the value of the machine, with an allowance for depreciation because of age, and with a minimum rate, determined, in the case of passenger cars, by a division into two classes according to the weight of the car. Minimum rates to be charged for trucks were determined, not by weight, but by capacity. Thus, the license fee for all passenger cars was set at two per cent of the manufacturer's retail price at the factory, but the minimum fee for cars weighing less than two thousand pounds was \$12.00, and for all others, it was \$15.00. Similarly, the license fee for trucks was set at two per cent of their value, but the minimum tax on trucks of less than two tons capacity was \$15.00, for those of from two to four tons capacity, \$30.00, and for all

50. St. Paul Dispatch, December 22, 31, 1920, January 25, March 4, 1921; St. Paul Pioneer Press, December 22, 26, 1920; Sparks, vol. 8, no. 1, p. 16, no. 2, p. 16 (January, February, 1921).

others, \$50.00. For trailers the minimum fee was set at \$2.00 for each ton, or fraction thereof, of carrying capacity. In figuring the cost of the license fee, a car or truck was valued at the full price during the first three years, seventy-five per cent of that price during the fourth and fifth years, and during the rest of the life of a vehicle the tax was based upon a fifty per cent valuation, provided, of course, that the minimum fee did not fall below the minimum fee for vehicles of its weight or carrying capacity. Trucks and trailers engaged in commercial freighting, and passenger busses with a capacity of more than seven passengers were taxed at a rate twenty-five per cent higher than the tax rate for trucks. Motorcycles paid a fee of \$5.00 and side cars were taxed an additional fee of \$3.00.⁵¹ Certain types of vehicles, such as farm tractors, were not subject to taxation under the provisions of the law, but were to be taxed under the laws governing the taxation of personal property. Other sections of the act dealt with the procedure for procuring licenses and made the secretary of state responsible for their issuance and for the collection of fees.⁵²

The constitutional amendment specifically authorized cities, villages, and boroughs to levy wheelage taxes against motor vehicles. The right to levy such

51. Laws, 1921, p. 710.

52. Laws, 1921, p. 708-724.

taxes, however, was strictly limited by the legislature in 1921. There was a general feeling that, if wheelage taxes were levied without any regulations, they might be placed at a level so high that the ownership of automobiles would be discouraged, or a revolt against all automobile taxes might result. Such a revolt, directed against a wheelage tax, actually did occur in St. Paul in 1921. It had a political background, but it also was brought about by the introduction of a measure in the legislature to limit wheelage taxes to one-half the amount of the state license fee. The maximum amount allowed under this bill, on the basis of the estimated license fees, was considerably below the amount of the St. Paul wheelage tax, which was approximately \$14.00 annually for a low-priced car. The strike was effective, for the St. Paul authorities, after futile attempts to enforce the ordinance, desisted in their efforts to collect the fee. The legislative bill limiting the taxing powers of municipalities in this respect was passed, but the law reduced the maximum wheelage tax that a municipality could levy to one-fifth the amount of the state license fee. The revenue that could be gained from this source was so small that most municipalities found it scarcely worth their while to attempt to collect such a tax. 53

53. Kumm, Constitution of Minnesota, 228; St. Paul Dispatch, December 8, 1920, March 3, 14, 1921; House Journal, 1921, p. 529; Laws, 1921, p. 697; William Ander-

The legislature had adopted legislation to build the trunk highways, and had passed laws providing for the financial program that their construction involved. It had one major piece of business to transact before the road program was disposed of satisfactorily, and that involved the keeping of a promise. The eagerness with which the counties rushed into a bond issuing program during 1919 and 1920 rightfully was attributed to the people's faith that the legislature would keep its promise to reimburse the counties if the amendment was adopted. When the amendment was endorsed by the electorate in 1920, the people expected that the promise would be fulfilled. Yet, the legislature showed a surprising reluctance to enact any legislation to that end, and it was not until well along in the session that the Senate permitted Senator McGarry, after a direct request from Governor Preus, to introduce a bill for that purpose. 54

The county reimbursement law provided for the repayment to the counties, from the trunk highway fund, of the principal on bonds issued after February 1, 1919, together with interest accruing on them at a rate not

son, Local Government and Finance in Minnesota, 131 (Minneapolis, 1935). Because many people had paid their wheelage taxes, even though the amount of the tax was in excess of the maximum amount allowed by the law, it was necessary for the legislature to pass another law permitting refundment of the excess charge. Laws, 1921, p. 762.

54. Senate Journal, 1921, p. 1059; Sparks, vol. 8, no. 3, p. 12 (March, 1921).

greater than five per cent annually, but, if any bonds were issued bearing a higher rate of interest, the counties had to pay the excess amount. The legislature further agreed to repay to the counties any money which they had taken from the state aid fund, from general taxation, or any other source, excepting federal aid, for the improvement of these roads, providing that the contracts for their improvement were made after February 1, 1919. The benefits were extended to include moneys paid by the counties to townships, boroughs, villages, or cities for the permanent improvement of roads included in the trunk highway system, if the work was done under the supervision of the state highway department. In all, this comprehensive measure provided for the assumption by the state of bonds with a value of slightly more than \$26,000,000. It was even more than had been promised by the legislature of 1919, and all of it had to be paid from the receipts from the sale of motor vehicle licenses. 55

With the enactment of this program of legislation, Minnesota could feel content. The state now could receive the benefits of the huge sums which the federal government was making available for road construction. By taking the responsibility for the construction and

55. Laws, 1921, p. 978-983; Commissioner of Highways of Minnesota, Reports, 1922, p. 9, 33-39. Under the provisions of the 1919 law, the state assumed bonds totaling \$12,985,571. The total amount assumed was \$26,390,107.

maintenance of the main roads from the local units of government, the construction of better roads for the farmers was made possible, for the state road and bridge fund was left untouched, and this fund henceforth was to be used for the construction of roads of secondary importance. The road laws of 1921 carried through a sweeping revision of the road policy of the entire state. They were a public recognition of the fact that the community, in the day of the automobile, was no longer to be measured in terms of a few miles, but was statewide in extent.

XII. THE GOOD ROADS REVOLUTION

Few of the men who argued in favor of better roads at the first good roads convention in St. Paul in 1893 could have foreseen what their ideas would grow into in the space of twenty-seven years. The changes amounted to a revolution, but they occurred so gradually that, until the final steps were taken, they were scarcely perceptible. It is only by comparing periods separated by a number of years that the development of the good roads idea shows up as a startlingly distinct achievement. In the matter of expenditures for roads and bridges this revolution in opinion was especially distinctive. In 1900 the total tax levy for roads and bridges amounted to \$757,981, and many of the people of Minnesota undoubtedly felt that they were overtaxed for that purpose. Five years later the road and bridge expenditures reached \$1,434,141. In 1910 the people of the state spent more than \$2,500,000, and in 1915 the total amounted to almost \$7,275,000. Five years later, in 1920, Minnesota spent well over \$22,000,000 on roads and bridges, and that fall the electorate of the state sanctioned the spending of an additional \$10,000,000 a year. During that same period there was an increase in the number of miles of road in the state, but the

increase was so small in relation to the increase in expenditures, that there obviously was little connection between the two. In 1906 the highway commission reported the total road mileage as a little more than 79,000; in 1920 there were about 98,000 miles of roads in the state.¹

The influence of state aid in inducing the local units of government to increase their expenditures for roads undoubtedly was great. In 1907, the first year that state aid was available, the proceeds of the one-twentieth of a mill state tax amounted to about \$54,800, and the commission found it hard to persuade the county officials to designate roads to receive that aid. In fact, in 1908, after two years, only sixty-four of the eighty-five counties of the state had taken the trouble to designate roads, and the total mileage of state-aid roads was only 4,032. By 1910 the mileage had increased to 7,153, and seventy-seven of the counties had designated roads. By 1911, however, the mileage had grown to a total of 12,688, and all counties were showing an interest in the state-aid fund. During 1912 and 1913 the mileage of state-aid roads increased to a little more than 16,000, but, because of the provision of the Dunn law which made it necessary to spend twenty per cent of the state aid for maintenance, the mileage was reduced

1. State Highway Commission of Minnesota, Reports, 1906, p. 15; Babcock and Mullen, State Trunk Highway System, 3; post, p. 479n.

in 1914 to 11,406, and from then until 1920 the average number of miles included in the state-aid road system remained about 13,000. In 1921, when the trunk highway system was set up, 6,851 miles were removed from the state-aid system, leaving 6,802 miles in that system. By the end of the year, however, additional state-aid roads had been designated, bringing the mileage to 8,358, and within a year or two, the total again approached the 13,000 mile average. ²

During this same period the amount of aid that the state gave the counties for the construction of roads gradually increased from \$54,800 in 1907 to \$1,933,822 in 1920. Under the watchful eyes of the state officials, these funds were expended solely upon the state-aid roads. In addition to aid from the state, aid from the federal government totaled almost \$5,000,000 during the last four years of the period. It was necessary for the local units of government to appropriate a sum of money equal to that granted by the state and federal governments, and this money could be spent only on roads

2. Commissioner of Highways of Minnesota, Reports, 1921, p. 29, 64, 1923, p. 77. The following table shows the mileage in the state-aid road system from 1908 to 1920.

1908	4,032.00	1914	11,406.51
1910	7,153.00	1916	12,700.00
1911	12,688.00	1917	13,198.91
1912	16,034.75	1919	13,203.80
1913	16,723.79	1920	13,653.00

The figures for this table were obtained from the reports of the state highway commission and after 1917 from those of the commissioner of highways.

designated to receive the aid. There seems to be in most people an almost irresistible impulse to take advantage of a bargain, and the counties, in order to take advantage of the state and federal aid offered them, undoubtedly raised more money by local taxation and special bond issues than they otherwise might have done. ³

The influence of the highway commission and the department of highways is evident in many ways. One of the first acts of the commission was to make experimental roads. In 1906 the highway officials demonstrated what could be done to improve roads by using

3. Following is a table of expenditures for roads and bridges from 1900 to 1920. The figures for the town and county appropriations were obtained from the reports of the state auditor; the figures for the state aid and federal aid appropriations were compiled from the reports of the state highway commission and after 1917 from those of the commissioner of highways.

Year	Town and County Appropriations	State Aid	Federal Aid
1900	\$ 757,981.04		
1905	1,434,140.94		
1907	1,776,923.15	\$ 54,800	
1908	2,055,114.93	72,650	
1909	2,264,254.40	74,090	
1910	2,426,709.89	79,400	
1911	2,600,437.72	79,300	
1912	2,785,106.88	340,000	
1913	4,272,254.15	350,000	
1914	5,237,665.00	1,400,000	
1915	5,794,226.61	1,480,000	
1916	6,595,020.60	1,500,000	
1917	8,473,016.92	1,432,150	\$ 142,394
1918	9,178,458.77	2,220,000	284,788
1919	13,513,613.61	1,969,017	1,846,640
1920	17,706,242.00	1,933,822	2,699,471

only the native materials that they found in the Red River Valley. The following year experimental roads were laid out in the sandy portions of the state, where a mixture of sand and straw was tried with good results on one road in Sherburne County. On a road in Isanti County a mixture of straw and sawdust proved to be slightly less successful. The problem of surfacing the roads also was attacked with energy by the state highway officials, and counties receiving state aid were encouraged to spend at least a portion of the aid for graveling roads, or, where sandy conditions prevailed, to apply a coating of clay on the sand and gravel.

A third way in which the highway officials encouraged local authorities was in their insistence upon proper maintenance of roads. The highway commission as early as 1909 was authorized to conduct experiments in the maintenance of the road system. A short extent of road in Dakota County was selected for the first experimental work, and the wisdom of the policy of adequate road maintenance at all times of the year was proved thereby.

By 1911 road maintenance was carried on in an experimental way, in eight counties. Discontinuance of the patrols, the commission reported, brought "very urgent protests." After 1913 a one-mill tax for the "dragging fund" was made compulsory throughout the state. By virtue of that fact, it was claimed, Minnesota became "the first state west of the Alleghenies to organize a

maintenance system," and under that system the state made "greater progress than almost any other State." ⁴ Throughout the story of the contacts of the highway commission with local authorities, the cumulative effect of the value of skilled technical training is perceptible. When the rapidly increasing volume of automobile traffic demonstrated that even with the best of care gravel roads deteriorated, it was the officials in the highway department who led the way in persuading people that a new system of hard-surfaced, all-weather roads was needed.

It is doubtful that the progress in road construction between 1900 and 1920 would have been made had it not been for the introduction of the automobile as a means of transportation. Riding in the automobiles of the early years of the twentieth century was uncomfortable at best, and the rougher the roads, the greater the degree of discomfort that attached to riding in them was. When automobiles became a common means of transportation, the number of advocates of good roads increased, and the inescapable fact remains that the revolution in road making was finally accomplished in the automobile age. The farmers of America were not sufficiently impressed by the appeals of the bicycle age, using as an argument the economic value to the

4. State Highway Commission of Minnesota, Reports, 1909-10, p. 24-29, 1911, p. 34; Babcock and Mullen, State Trunk Highway System, 14.

farmers of good roads, to improve their market roads. The change came only when the farmer bought an automobile. What the appeal to the farmer's pocketbook could not do, the jolting of a "flivver" over a rough country roadway accomplished.

The revolution in road making as evidenced by the development of the Babcock plan of roads was the Minnesota manifestation of a condition that prevailed throughout America at the same time. From one end of the United States to the other, a revolt against poor road conditions broke out during the years immediately following the end of the war. Virginia, in 1918, enacted legislation to set up a system of state roads, constructed by the state and financed by a general property tax. In Pennsylvania the people authorized a road bond issue of \$50,000,000 the same year, while in Michigan a constitutional amendment was ratified in 1919 permitting the state to issue up to \$50,000,000 in bonds to finance the construction of a system of trunk highways.⁵ North Carolina, to cite another example, was in the midst of a struggle during 1920 and 1921 to provide a system of state highways, and in North Dakota plans were made in the fall of 1920 for the opening of a campaign for a plan of road con-

5. Tipton R. Snively, Duncan C. Hyde, and Alvin B. Biscoe, State Grants-in-Aid in Virginia, 159 (New York, 1933); Frank E. Rogers, History of the Michigan State Highway Department, 1905-1933, 103-107 (Lansing, 1933); Wilbur C. Plummer, The Road Policy of Pennsylvania, 90 (Philadelphia, 1935).

struction similar to that of Minnesota. ⁶

The basic factors motivating the revolt were everywhere the same. The numerous warnings that the automobile was pushing the world into a new era of transportation went unheeded, and the motor vehicle crept in almost unnoticed to supplant the horse and buggy of the nineteenth century. In 1900 the automobile was the new and exciting toy of a few persons who were reckless enough and wealthy enough to own them. A decade later, they were commonplace enough to occasion little comment, but the wiseacres refused to entertain the idea that a motor-driven vehicle could supplant the traditional horse-drawn vehicles of their day. In another decade -- by 1920 -- the automobile was the vehicle in which thousands of people traveled in every-day life, from home to office, from farm to town, from town to town. The automobile completely changed the old concepts of time and distance. Where six or eight miles had been the common radius of travel for pre-war Americans, the post-war generation lived in a community the extent of which reached out a hundred miles on all sides. The state, not the township or the county, was the unit in terms of which that generation thought. ⁷

6. Brown, State Highway System of North Carolina, 73-123; St. Paul Pioneer Press, December 22, 1920.

7. For a recognition of this increased radius of travel, see St. Paul Pioneer Press, January 13, 1919; H. M. Orfield to Koll, August 18, 1920, in the Koll Papers; Babcock and Mullen, State Trunk Highway System, 14.

The statistics of the number of automobiles in different parts of the nation are an interesting gauge of the increasing popularity of the automobile. In 1900 there were, at the most, but a few more than three thousand automobiles in the entire nation. Yet, in 1913 there were in Michigan alone a total of 60,468 registered automobiles. Half a dozen years later, in 1919, the number of licensed automobiles in Michigan had increased to more than 325,000. There were about 10,000 automobiles in the state of North Carolina in 1913; in 1920 the number had increased to almost 130,000. In Minnesota the increase was similarly marked. In 1913 the number of cars was about 45,000; by 1920 it had increased to 300,000. For the nation as a whole, the number of automobiles increased from a little less than 1,750,000 in 1914, to a little more than 7,500,000 in 1919. In the pre-war period, the owners of automobiles were decidedly in the minority. In 1920, they still constituted a minority of the population, but they were a minority which had become highly vocal and efficiently organized. ⁸

During the years between 1913 and 1920, the nation passed through a trying crisis, and the energies of the

8. Rogers, History of the Michigan State Highway Department, 102; Brown, State Highway System of North Carolina, 53, 190; Secretary of State of Minnesota, Reports, 1912-14, p. 4, 1918-20, p. 3. The total number of automobiles by states is given in Public Roads, vol. 3, no. 25, p. 13 (May, 1920).

people were directed to a successful prosecution of a war. During that period, all activities which did not further the war program were relegated to the background. One of the reasons for this was the shortage of labor. With a large proportion of the available man power of the nation dedicated to the war service, and a still larger proportion devoted to the task of producing war materials, the number of men who could be hired for road-building purposes was too small to permit much of an impression to be made upon the huge task of building needed roads. Maintenance of the existing systems was, perhaps, more than could be expected of a nation so preoccupied. ⁹

With the return of peace, however, the situation suddenly changed. By 1920 the nation had awakened to the fact that the automobile was a permanent part of the transportation system. Then the people found that they had on their hands an antiquated road system built for vehicular traffic which moved much more slowly than did that of 1920. The disbandment of the huge army which had been built up during the war years, and the release of that still larger army engaged in the manufacture of the materials of war, spilled out upon the nation a

9. Report of the chief of the bureau of public roads, in Department of Agriculture, Reports, 1919, p. 397; Commissioner of Highways of Minnesota, Reports, 1918-19, p. 3; Babcock and Mullen, State Trunk Highway System, 12.

labor supply for which employment had to be found. 10 On top of this, the nation, during the years of war, had experienced a colossal inflation of ideas and values. During the period of high prices which prevailed during the war, the nation endured a brief era of extraordinary prosperity, and men who, before the war, thought in terms of thousands, now found that millions were as easily envisioned. The idea of incurring large debts for the construction of roads, no longer roused feelings of horror in the man on the street, and he was willing, even eager to embark upon a plan which would give him and his family broad, even avenues of communication.

Americans had the imagination necessary to plan for roads on a large scale without flinching at the thought of the heavy expenditures their construction involved. But behind them, and encouraging the activities of groups in the various states, stood the federal government. A large measure of responsibility for the sudden burst of activity in road building and the reform in practices of administration, as well as construction, in the period immediately following the war must be laid at the door of the federal government. The national

10. The appropriation for roads by Congress in 1919 was, to a considerable extent, based upon the necessity of finding employment for the men discharged from the army. Congressional Record, 65 Congress, 3 session, 2801-2805.

road appropriation measure of 1916 and the supplementary act of 1919 had "far reaching results, not only in the financial aid" they "rendered the several states, but by directly causing them to organize State Highway Departments equipped with staffs of engineers capable of supervising the construction of highways to the satisfaction of the U. S. Bureau of Public Roads." 11 More than that, the act of February 28, 1919, gave a summary warning to states which had failed to make provision for a constructive program of road building that, unless they reformed their ways, the federal aid would be withheld from them. 12

Equally powerful as a stimulant to progressive road building was the action of the federal government in distributing among the states excess war material which could be adapted for use in constructing highways. Under the provisions of the act of February 28, 1919, the secretary of war was authorized to turn over to the secretary of agriculture war material and equipment not needed for military purposes, and the department of agriculture was to parcel it out among the states. 13 The distribution of trucks, tractors, and other heavy equipment was begun at once, and by the end of 1920 Minnesota alone had received a total of 632 motor trucks

11. Rogers, History of the Michigan State Highway Department, 98.

12. Ante, p. 453; Commissioner of Highways of Minnesota, Reports, 1918-19, p. 3.

13. Statutes at Large, 40: 1201.

and tractors valued at more than \$1,900,000, together with other materials, such as engineer's equipment, road-building machinery, explosives, and wagons and harnesses, valued at almost \$350,000. Many of these pieces of equipment were new; others required extensive repairs or rebuilding in order that they might be used. When the machinery was in good running condition, the state highway department lent it to the counties for use on roads, the only charge made for it being the actual cost of repairs and shipping. When the trunk highways amendment became operative, of course, it became necessary for the highway department to build up an inventory of road-making equipment for its own purposes, and the amount of excess war materials distributed to the counties was reduced. In Minnesota the action of the federal government had the effect of stimulating local efforts to build roads, and, since the materials were distributed among all the states, the cumulative effect of the federal action cannot have been other than great. ¹⁴

It was under such circumstances that the constitutional amendment of 1920, and the legislation of 1921, came into existence. The Minnesota plan adapted for

14. Commissioner of Highways of Minnesota, Reports, 1918-19, p. 4, 1920, p. 37-40, 1922, p. 19, 21; reports of the chief of the bureau of public roads, in Department of Agriculture, Reports, 1919, p. 411, 1922, p. 462, 1923, p. 489, 491.

use the ideas which were being tried elsewhere. Many states, by 1920, had delineated systems of trunk or main highways. Many of them had taken over the task of building such roads. All the states followed a procedure of taxing motor vehicles, and in most of them at least a portion of the proceeds was devoted to the construction of roads. In 1920 Minnesota was the only state in the Union which did not require an annual registration, and one of the few which did not utilize the income from the sale of such licenses for road purposes.

Public Roads, a publication sponsored by the federal road bureau, estimated that in 1920 sixty-six per cent of the income from automobile license fees in the country as a whole was used for road construction under the supervision of state highway officials. The remainder went for local roads or other local expenditures.¹⁵ To the extent that the income from the sale of automobile licenses was dedicated to paying for the construction of a system of highways, Minnesota, therefore, in 1921 was falling into line with other states.

15. Inaugural Message of Governor J.A.O. Preus to the Legislature of Minnesota, January 5, 1921, 16; Public Roads, vol. 3, no. 25, p. 12, 15 (May, 1920). The cost of license registration in a number of near-by states in 1920 was: Wisconsin, \$10.00; Illinois and Ohio, \$8.00 to \$25.00, according to valuation and weight; Iowa, 1 per cent of value, plus \$.40 per hundred pounds of weight. In all these states, motor vehicles were subject to a personal property tax in addition to the license fee. Public Roads, vol. 3, no. 25, p. 14-17 (May, 1920). See also St. Paul Dispatch, December 26, 1920.

The Minnesota program, however, contemplated the construction of a network of trunk or main highways without recourse to taxing other property, and this was something of an innovation, for, in other states undertaking a similar program at that time, a portion of the cost of construction was paid by a general tax. Even in Minnesota the amendment provided for a general tax if the revenue from automobile licenses was insufficient to pay the whole cost.¹⁶ The authors of the constitutional amendment asserted that the possibility that a general tax would be resorted to was remote, and that the clause was inserted in the measure to serve as a guarantee to purchasers of highway bonds that they would receive their money when the bonds matured. Otherwise, they claimed, the bonds could not be sold. On the assumption that the clause was inserted as a perfunctory guarantee of payment and was not intended to be used, the Minnesota plan may be considered a pioneer in the field of highway financing. There were said to be only

16. In Wisconsin the road-building program was based upon an equal sharing of cost between state and counties, with federal aid funds amounting to one-third of the entire cost. St. Paul Dispatch, December 27, 1920. In Michigan the counties, or townships, participated in the cost of building the trunk line roads in amounts ranging from five to twenty-five per cent, according to the assessed valuation of property. Rogers, History of the Michigan State Highway Department, 104. In Pennsylvania the income from the license fees was devoted to road construction and maintenance, but in addition specific legislative appropriations were made. Plummer, Road Policy of Pennsylvania, 103.

six states in 1920 -- Alabama, Illinois, Maine, Minnesota, Nevada, and Utah -- which planned to finance highway construction by the sale of bonds redeemable from the proceeds of the motor vehicle license fees. The question raised by this departure in highway finance was whether the income from motor vehicle registrations would be sufficient to permit the inauguration of both an extensive campaign of trunk highway construction, and an adequate system of maintenance. The sponsors of the Minnesota plan were sure that, with the federal help that was available, there would be enough funds for all purposes. At all events, the Minnesota plan was the object of close scrutiny by good roads leaders in other states. It marked the opening of an intensive campaign to give the entire state a connected system of well maintained, well improved, surfaced roads. ¹⁷

The Babcock plan did not bring Minnesota to the millennium. It did not even take Minnesota entirely "out of the mud." But it did bring the state to an era of scientific road construction, and introduced it to a period of high-speed highway transportation. It completed the revolution which began in the nineties when the idea of state participation in road making was

17. Public Roads, vol. 3, no. 25, p. 13 (May, 1920); St. Paul Dispatch, December 20, 1920. The latter item is an interview by a reporter with Babcock and Mullen upon their return from the annual meeting of the American Association of State Highway Officials, held in Washington, D. C., in mid-December.

brought out for public discussion. It did not mean that the state took over all the responsibilities for road construction and road making. But it set up a new system of highways which was independent of local roads, and, by relieving the local communities of a portion of the financial burden which they had borne, it enabled them to improve roads serving less heavily traveled regions. Moreover, the trunk highways, constructed by men skilled in the work, constituted models for local authorities to emulate.

In a sense the road system outlined in the amendment of 1920 resembles the road system which the pioneers laid out when Minnesota was young. The pioneers were concerned with problems very similar to those dealt with by the Babcock plan of roads. They needed a system of communication which would bind together all the principal points in the settled areas of the state. The roads of the pioneers were built in a day when wagon roads constituted the principal links of communication for most of the state. Their main roads, therefore, were arterial highways leading from one main town to another. It was essential to the pioneers that the system be co-ordinated, for mail service had to be carried on over it, and passenger and freight service as well. During the last half of the nineteenth century this need for a co-ordinated system was obviated by the construction of railroads, for the rail link pro-

vided a means for getting from one town to another. During this period the wagon road was simply a method by which people living in the country could get to town; they became just country roads.

The Babcock plan combined the two ideas. The local or farm to market road was just as essential in 1920 as it was in 1890, and the automobile made the trunk highway just as important as were the main thoroughfares of the fifties in the century before. The triumph of the Babcock plan lay in its ability to serve both needs without impeding either. Indeed, by its organization, the development of both kinds of roads was fostered. In one respect, the Babcock plan meant a return to pioneer principles. The modern highway engineer is not so much concerned over the necessity for following section lines; he is chiefly concerned with locating the easiest grade and the most practicable route. That was the plan of the pioneers. It was only in the period of development which followed the conquest of the frontier that the pioneer trails were rerouted and put on the section lines, whether or not they represented the most practicable routes of travel. There the resemblance between the old and the new ends, for in the pioneer era, and for long after, the distinguishing feature of road construction and maintenance was the labor tax, the small road district, and the road overseer. These have been driven into the discard.

BIBLIOGRAPHY

The sources upon which this study of Minnesota roads is based are divided into the following classifications: manuscripts and archives, printed documents, newspapers and periodicals, printed articles and books, and maps. This bibliography is not a complete list of all materials consulted in the course of the study. It is, rather, a list of the items which yielded information about Minnesota roads.

Manuscripts and Archives

In the study of the development of Minnesota roads, the information derived from manuscript and archival materials is invaluable. The personal papers of the men who loom large in the public affairs of Minnesota, the diaries and letters of men and women who occupy a less elevated position in the story of the state, the reminiscences of leaders and others, and the archival material stored away in obscure vaults in state and county buildings in Minnesota and in offices of the federal government in Washington all contribute to the information necessary to an understanding of the development of the road system. It is characteristic of these raw resources of historical research that, with relatively few exceptions, the in-

formation relating to special subjects is hidden away in a mass of other material, and, because of the difficulties involved, they seldom have been adequately calendared. The investigator may experience a feeling of disappointment at the meager results which apparently are obtained from a lengthy search through extensive collections of such manuscript materials, but the aggregate results of his search will more than justify the time so spent. At the Minnesota Historical Society the student will find the personal papers of hundreds of Minnesota men and women. He will find that the task of using these papers is made simpler because of the Guide to the Personal Papers in the Manuscript Collections of the Minnesota Historical Society, compiled by Grace Lee Nute and Gertrude W. Ackermann, and published by the society in 1935 as number 1 of its Special Bulletins. Four hundred and fifty-five collections of personal papers, diaries, reminiscences, and autobiographical sketches have been listed, and they are so well described that the user of manuscripts at once can eliminate those which have no bearing on his particular subject.

Manuscripts

Personal Papers

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Brown, Joseph R., Papers, 1838-70. Minnesota Historical Society. Contain an account of Brown's experiment with steam tractors in Minnesota and Nebraska.

Carpenter, Cephas W., Papers, ca. 1868-83. Minnesota Historical Society. Account books and records of the Northwestern Express, Stage, and Transportation Company during the sixties and seventies, of which Carpenter was secretary.

Crowe, Isaac, Papers, 1843-75. Minnesota Historical Society.

Cummins, John R., Papers, 1850-1916. Minnesota Historical Society. Cummins' diary, which covers the years from 1855 to 1916, is valuable for information on local road conditions and methods of building roads.

Donnelly, Ignatius, Papers, 1850-1909. Minnesota Historical Society. Contain little information about roads, although Donnelly traveled extensively. A good description of a steam propelled ferry boat for which Donnelly was bargaining in the late fifties is to be found in the papers. There is a card calendar of items in these papers covering the periods from 1850 to 1859 and from 1864 to 1878 in the Minnesota Historical Society.

Drew, Edward B., Papers, 1848-93. Minnesota Historical Society. The diary of a farmer living near Winona from 1852 to 1893.

Dunn, Andrew C., Reminiscences, 1916. Minnesota Historical Society. Contain information about St. Paul and Sauk Rapids in the fifties, and the Red River cart trains.

Folwell, William W., Papers, 1769-1933. Minnesota Historical Society. A voluminous collection of family and personal papers. Of particular interest in the preparation of this work were the notes and papers collected by Folwell in the course of the preparation of his four-volume History of Minnesota, published by the Minnesota Historical Society from 1921 to 1930. Included among them are two folders entitled "J. R. Brown" and "Steam Engine" which are of particular value in tracing the development of Joseph R. Brown's steam tractor for hauling freight on the prairie roads.

Grout, Jane M., Diary, 1873. An account of a journey by covered wagon from central Wisconsin to Luverne,

Minnesota. Contains a considerable amount of information about the roads over which the Grout party traveled. The Minnesota Historical Society has a copy of the diary.

Hill, Alfred J., Papers, 1855-95. Minnesota Historical Society. These papers are exceptionally full of material relating to early roads, particularly military roads. The papers include field notes of Simpson in his surveys of the Point Douglas-Lake Superior and Point Douglas-Fort Ripley roads made in 1851 and 1852, the field notes made by Reno when he surveyed the Mendota-Big Sioux road in 1853, notes by Potter and Emerson in their surveys of the Swan River-Winnebago agency road in 1851, and the notes of a reconnaissance of the Fort Ripley-Red River road made in 1857. In addition, there are surveyor's notes for the different roads, and tracings of maps showing their routes. A feature of the papers is a notebook containing exquisitely drawn and colored sketch maps of sections of the different roads which Hill prepared.

Jackson, Mitchell Y., Papers, 1852-62. Minnesota Historical Society. A diary of a farmer in Washington County for the years indicated.

Koll, Mathias N., Papers, 1916-26. Minnesota Historical Society. Koll, a resident of Cass Lake, was secretary of the Minnesota Scenic Highway Association, secretary of the Cass Lake Commercial Club, secretary of the Cass County Co-operative Creamery Association, president of the Minnesota division of the Theodore Roosevelt International Highway Association, and held various offices in the Northern Minnesota Development Association, a corporation designed to develop the agricultural and recreational facilities of the region. Included in these papers are several thousand letters which contain valuable information about the development of trail associations and the movement for better roads. They are particularly valuable for the period from 1916 to 1920.

Lea, Albert M., Papers, 1833-79. An autobiographical sketch of Lea as an officer in the United States army. Also contain sketch of route followed by a detachment of troops in southern Minnesota in 1835.

Long, Stephen H., Diary, 1823. Minnesota Historical Society. Account of the Long expedition to the Red River in 1823, contained in three small volumes.

McCormick Harvesting Company Papers, 1853-86. Originals

in the possession of the McCormick Historical Association, Chicago. Filmstrips of material relating to Minnesota at the Minnesota Historical Society. The reports of agents of the company in Minnesota, and correspondence with the home office. Throw light on road and travel conditions in Minnesota and on the relation of roads to business. A card calendar of the materials in the Minnesota Historical Society is available at the society.

Murray, William P., Papers, 1836-1929. Contain some information about the development of the road system during the early fifties.

Ramsey, Alexander, Papers, 1849-69. Minnesota Historical Society. The papers of the first governor of the territory and second governor of the state contain considerable material relating to the government roads in Minnesota. An incomplete card calendar of these papers is available at the Minnesota Historical Society.

Rice, Henry M., Papers, 1848-99. Minnesota Historical Society. There are only stray items in the papers, and they do not throw much light on Rice's activities.

Robertson, Daniel A., and family, Papers, 1814-1933. Minnesota Historical Society. Contain an agreement, dated in 1859, for the completion of a road from Superior, Wisconsin, to St. Paul.

Sibley, Henry H., Papers, 1815-91. Minnesota Historical Society. Include letters received by Sibley from 1815 to 1891 and four volumes of letter books covering the years from 1849 to 1854. The papers examined extend over the period from 1834 -- the year Sibley came to Mendota -- to 1891. They contain a great deal of valuable information about travel conditions to the Red River country, and about the struggle to gain appropriations for military roads in Minnesota. A card calendar covering the years from 1815 to 1849 is available at the Minnesota Historical Society.

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Kirchner, William H., "Transportation in the St. Croix Valley, 1865-1880." A term paper written for a seminar class in American history at the University of Minnesota in 1931. Concerned chiefly with railroads. A copy is in the possession of the Minnesota Historical Society.

Merritt, T. H., "Recollections of the Swan Lake Road and Other Roads." A paper read before a session of the St. Louis County Historical Society in July, 1937. Deals with roads in St. Louis County. A copy is in the possession of the Minnesota Historical Society.

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The "Calendar of Materials of Upper Mississippi Valley Interest in Federal Archives," compiled by Dr. Newton D. Mereness, is an invaluable guide to the student of federal activities in road making. It is a card calendar of the materials in the archives of the state, interior,

war, and post-office departments, and of the United States Senate. The calendar is not yet complete for all departments of the federal government, and includes no report on the materials in the archives of the House of Representatives, the Supreme Court, the attorney general, or the departments of commerce, labor, navy, treasury, and agriculture. A master copy of the calendar is available in the National Archives at Washington, D. C., and a complete copy is to be found at the Illinois State Historical Society. For the period before 1850, the Minnesota Historical Society possesses copies of all items relating to Minnesota and contiguous regions, and most of the other items as well. For the later period, only those relating to Minnesota and contiguous regions are filed in the society's manuscript division. The society has photostatic or typewritten copies of many of the documents and letters calendared. The following materials in the war and interior departments proved especially valuable for this work:

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Minnesota Archives

Noncurrent material in the state archives has been transferred to the Minnesota Historical Society from the offices of the governor, secretary of state, adjutant general, attorney general, surveyor of logs and lumber, surveyor general, and from the Supreme Court. Other archives are stored in the vaults of the various departments. For a study of roads the most important of the archives are those of the offices of the governor, the secretary of state, and the highway department. In using the material in these archives it is helpful to consult Herbert A. Kellar's "Preliminary Survey of the More Important Archives of the Territory and State of Minnesota," in the American Historical Association, Reports, 1914, vol. 1, p. 385-476 (Washington, 1916). In 1929 a supplementary survey of the archives of the state departments was made by Donald E. Van Koughnet. Because of the repeated moving about of state records during the past few years, both surveys are now out of date. However, under WPA auspices, a survey of the archives was made during 1935 and 1936. The results of this survey are as yet unpublished, but the inventory may be used at the Minnesota Historical Society. A card calendar of the materials in the Governors' Archives for the period from 1849 to 1874 is available at the Minnesota Historical Society.

County and Town Archives

It is in the archives of the counties, towns, and villages that detailed information about local procedure in the construction, maintenance, and financing of roads can best be traced. In a general study of roads, such records are of value chiefly for determining the extent of local activity and for illustrative purposes. It is inconceivable, however, that any study of road development in a localized area could be made without extensive use of such records. The minutes of the boards of county commissioners, usually found in the office of the county auditor, record official action on county roads. The surveys and plats are registered in the office of the register of deeds, and the amounts levied for road and bridge taxation are recorded in the office of the county auditor. In the offices of the county highway engineers are to be found survey notes and maps of roads made since the creation of the offices. For townships, the records of the town clerk contain the information about town activities in road matters. In most Minnesota counties, these local records are comparatively complete, and are available for consultation in most cases. The Minnesota Historical Society began a survey of county records almost two decades ago, but was forced to discontinue it because of a lack of funds. During 1933 the project was resumed under the auspices of CWA. The inventory was continued under FERA, and,

when the federal government set up the WPA in 1935, a nation-wide survey of local records was carried on under the general supervision of the National Archives. In Minnesota the project functioned in close co-operation with the Minnesota Historical Society. To date it has resulted in a complete inventory of the records of most of the Minnesota counties, most of the townships, and many of the villages and cities of the state. The results show how surprisingly fortunate Minnesota has been in the preservation of local records. An inventory of the records in Minnesota is now being published, in county units, by the WPA.

Printed Documents

The documents used have been of three kinds: documents published by the United States government; those published by the territory and state of Minnesota and other governmental units; and the official, printed records of municipalities and organizations. From the national documents the official records relating to the government roads in Minnesota, and the activities of the government in the good roads movement were obtained, as well as the record of the legislative struggle to obtain appropriations for roads in Minnesota. The state documents -- consisting of laws, the journals of the two branches of the legislature, and the executive documents of the state -- furnish the official records

of territorial and state road making. From the third set of documents, information concerning the activities of various organizations interested in the promotion of road building was obtained.

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- No. 2. Proceedings of the Minnesota Good Roads Convention Held at St. Paul, Minn., January 25, 26, 1894 (1894). The official account of the first state-wide good roads convention. The date mistakenly appears as 1894 throughout the publication instead of as 1893.
- No. 10. Proceedings of the National Road Conference Held at Westminster Church, Asbury Park, N. J., July 5 and 6, 1894 (1894). Contains information on the status of the good roads movement in Minnesota.
- No. 21. Proceedings of the International Good Roads Congress, Held at Buffalo, N. Y., September 16 to 21, 1901 (1901). Contains an article by George W. Cooley entitled "Method of Construction and Cost of Gravel Roads in Hennepin County, Minn." This is a technical analysis of road construction in the county.
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- No. 32. Maurice O. Eldridge, Public-road Mileage, Revenues, and Expenditures in the United States in 1904 (1907). Contains road statistics, part of which were taken from the 1906 report of the state highway commission.

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- No. 31. A. B. Choate, State Aid to Road Building in Minnesota (1898).
- No. 36. List of National, State, and Local Road Associations and Kindred Organizations in the United States.
- No. 80. Maurice O. Eldridge, Public Roads of Minnesota: Mileage and Expenditures in 1904 (1907).

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- Reports of the commissioner of Indian affairs to the secretary of the interior, October 22, 1866, in 39 Congress, 2 session, House Executive Documents, no. 1, part 3, p. 25-362 (serial 1284); December 23, 1869, in 41 Congress, 2 session, House Executive Documents, no. 1, part 3, p. 446-1058 (serial 1414); October 31, 1870, in 41 Congress, 3 session, House Executive Documents, no. 1, part 4, p. 467-859 (serial 1449); November 15, 1871, in 42 Congress, 2 session, House Executive Documents, no. 1, part 5, p. 417-1122 (serial 1505); November 1, 1874, in 43 Congress, 2 session, House Executive Documents, no. 1, part 5, p. 313-648 (serial 1639);

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- 2 session, Senate Executive Documents, no. 1, p. 217-229 (serial 659).
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- Report of George Thom to J. J. Abert, September 5, 1857, in 35 Congress, 1 session, Senate Executive Documents, no. 11, p. 348-355 (serial 920).
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Newspapers and Periodicals

In many respects, the newspapers and periodicals have constituted the richest source of information for this study. They serve not only as distributors of information, but as barometers of public and political opinion as well. The opening of roads during the frontier period was almost inevitably chronicled in the

newspapers, and the part of the roads in the political activity during that phase of Minnesota's development is no less marked in their columns. Sometimes editors may have erred on the side of overstatement in the description of local road conditions during the period from 1860 to 1900, but few other contemporary observers recorded their impressions of roads. In the good roads movement, the newspapers and periodicals often became frankly propaganda instruments -- either for or against the good roads crusade -- but they also recorded the rise and fall of sentiment to which they personally may have been opposed. The files listed below have been consulted. They are by no means all the newspapers which could have been used, but they are representative from the point of geographical distribution, time, and the attitudes toward the road problem. Unless otherwise specified they are in the possession of the Minnesota Historical Society.

Aitkin Age, 1882-1906. Weekly. The file for the period for 1882-90 is incomplete.

Alexandria Post, 1868-94. Weekly.

Anoka County Union (Anoka), 1893-1900. Weekly.

Bear River Journal, 1913-18. Weekly.

Bemidji Daily Pioneer, 1904-35.

Blue Earth City Post, 1869-1900. Weekly.

Brown County Journal (New Ulm), 1918-21. Weekly.

Carver Weekly Free Press, 1884-97.

Cass County Pioneer (Walker), 1918-21. Weekly.

Chatfield Democrat, 1857-62. Weekly.

Chatfield Republican, 1856-61. Weekly.

Crow Bar (Minneapolis), 1894-1919. Monthly. A trade journal published for the blacksmiths of the Northwest.

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Daily Minnesotian (St. Paul), 1854-61.

Daily Pioneer and Democrat (St. Paul), 1855-60. Followed the Daily Minnesota Pioneer. Followed by the Pioneer and Democrat.

Daily Pioneer Press (St. Paul), 1879-1909. Followed the Pioneer Press. Followed by the St. Paul Pioneer Press.

Dakota County Tribune (Farmington), 1894-99. Weekly.

Delano Eagle, 1881-1900. Weekly.

Detroit Record (Detroit Lakes), 1872-75, 1877, 1891-1916. Weekly.

Dodge County Record (Dodge Center), 1885-88, 1890-1920. Weekly.

Duluth Minnesotian, 1869-75. Weekly.

Engineering News and American Railway Journal (Chicago and New York), 1890-96. Hill Reference Library, St. Paul.

Evening Tribune (Minneapolis), 1890-1907. Daily.

Faribault Republican, 1870-1920. Weekly.

Farm, Stock and Home (Minneapolis), 1886-1910. Weekly. During the nineties, edited by Sidney M. Owen, twice candidate for governor on the Populist ticket. Hence it shows the attitude of Populists toward the good roads movement.

Farm Students' Review (St. Anthony Park), 1896-1905. Monthly during the school year. Published by the students of the college of agriculture of the University of Minnesota. One number, that for May, 1896, was devoted entirely to good roads.

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- Fergus Falls Advocate, 1871-76. Weekly.
- Fergus Falls Journal, 1876-80, 1889-1917. Weekly.
- Fillmore County Republican (Preston), 1870-75. Weekly.
See also the Preston Republican.
- Fisher Bulletin, 1880-84. Weekly. For part of this period, called Fisher's Landing Bulletin or Fisher Landing Bulletin.
- Freeborn County Standard (Albert Lea), 1860-62, 1868-1920. Weekly.
- Glencoe Register, 1857-63, 1868-1907. Weekly. Called McLeod County Register, April 9-July 2, 1868.
- Goodhue County Republican (Red Wing), 1859-80. Weekly.
- Great West (St. Paul), 1889-94. Weekly. A Farmers' Alliance publication.
- Harmony News, 1928. Weekly.
- Hastings Independent, 1857-66. Weekly. The file for 1857 and 1858 is incomplete.
- Hector Mirror, 1889-1900. Weekly. The file for 1889 and 1890 is incomplete.
- Hokah Chief, 1858-62. Weekly. The file for 1858 and 1859 is incomplete.
- Hubbard County Enterprise (Park Rapids), 1883-95, 1916-20. Weekly. Followed the Park Rapids Enterprise.
- Hutchinson Leader, 1886-1900. Weekly. The file for the period from 1886-89 is incomplete.
- Jackson Republic, 1870-80. Weekly.
- Jefferson Highway Declaration (Des Moines), 1916-19. Monthly. Followed by Modern Highway.
- Lac qui Parle County Press (Lac qui Parle), 1873-78. Weekly.
- Lake City Republican, 1900-16. Weekly.
- Lake Crystal Union, 1889-1906. Weekly.
- Mankato Daily Free Press, 1888-90.
- Mankato Free Press, 1879-80, 1887-88, 1890-1918. Weekly.

Mankato Weekly Union, 1863-79.

Mapleton Enterprise, 1885-1900. Monthly to May, 1888; then weekly. The Minnesota Historical Society's file begins with 1890. A file for the earlier years is in the possession of the publisher.

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Minneapolis Journal, 1886-1920. Daily.

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Minnesota Leader (St. Paul), 1918-21. Weekly. The official organ of the Nonpartisan League in Minnesota.

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Minnesota Republican (St. Anthony and Minneapolis), 1854-58. Weekly.

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Modern Highway (Des Moines), 1919-23. Monthly. Followed Jefferson Highway Declaration.

National Republican (Preston), 1881-87. Weekly.

New Era (Sauk Rapids), 1860. Weekly.

Northern Tier (Crookston), 1879-80. Weekly.

Northfield Independent, 1891-1921. Weekly.

Northfield News, 1887-1920. Weekly.

Northwestern Agriculturist (Minneapolis), 1889-1914.
Monthly to December, 1893; then semimonthly. Edited
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Otter Tail City Record, 1871-72. Weekly.

Park Rapids Enterprise, 1882-83. Weekly. Followed by
the Hubbard County Enterprise.

Pioneer and Democrat (St. Paul), 1860-62. Daily. Fol-
lowed the Daily Pioneer and Democrat. Followed by
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Followed by the Daily Pioneer Press.

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May-October, 1876. Daily. Followed the St. Paul
Daily Pioneer Press. Followed by the Pioneer Press.

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Preston Republican, 1867-70, 1875-84. Weekly. See also
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Preston Times, 1891-1920. Weekly.

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by his daughter, Grace Dunn.

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St. Anthony Express, 1851-56, 1860-61. Weekly.

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Weekly Minnesotian and Times (St. Paul), 1859-61. Followed the St. Paul Weekly Minnesotian.

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Wesson, Katharine, "Early Overland Routes of Travel to La Crosse," in La Crosse County Historical Society, La Crosse County Historical Sketches, series 2, p. 19-27 (La Crosse, 1935).

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Young, Jeremiah S., A Political and Constitutional Study of the Cumberland Road (Chicago, 1904).

County and Regional Histories

During the closing years of the nineteenth century and the opening years of the twentieth, Minnesota, as well as most other states, was flooded with county and regional histories, written and published as purely commercial ventures. In most respects, they are dishearteningly mediocre and monotonously similar in the method of organization and treatment. They have several redeeming features, however, which make it impracticable for the student to neglect them. Almost all of them, for

example, contain excerpts from the minutes of the meetings of the boards of county commissioners of the various counties, and these excerpts are of aid in determining the action of the localities in laying out roads. They also contain chapters relating to the different townships, which, in turn, throw light on the activity of these units of government in dealing with their communication problems. Some of the county histories, however, have a far greater value than this, for, because of the early dates at which they were published, they partake of the nature of contemporary documents. In some of the counties, moreover, the official records have been destroyed by fire, the elements, or careless officials, and in such cases the county histories become almost invaluable, inaccurate and unsatisfactory as they may be in other respects. Another valuable feature of the county histories is the fact that they invariably contain biographical sketches of pioneers and prominent businessmen. In spite of the fact that these biographies were paid for by the men or women whose lives are described, and are colored or amplified in accordance with the means of the individual or his position in the community, they nevertheless are of importance in tracing the routes of travel in pioneer regions, and in studying the development of an ever increasing network of roads. A list of such histories used in this study follows.

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Anonsen, Stanley H., History of Swift County (Benson, Minnesota, 1929).

Atwater, Isaac, and John H. Stevens, History of Minneapolis and Hennepin County (New York, 1895). Two volumes.

Barrett, Joseph O., History of Traverse County (Brown's Valley, Minnesota, 1881).

Bishop, Judson W., History of Fillmore County (Chatfield, Minnesota, 1858).

Brown, John A., ed., History of Cottonwood and Watonwan Counties (Indianapolis, 1916). Two volumes.

Bryant, Charles S., History of Houston County (Minneapolis, 1882).

Budd, William H., History of Martin County (Fairmont, Minnesota, 1897).

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Castle, Henry A., History of St. Paul and Vicinity (Chicago and New York, 1912). Three volumes.

Child, James E., History of Waseca County (Owatonna, Minnesota, 1905).

Curtiss-Wedge, Franklyn, ed., History of Dakota and Goodhue Counties (Chicago, 1910). Two volumes.

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Curtiss-Wedge, Franklyn, ed., History of Renville County (Chicago, 1916). Two volumes.

Curtiss-Wedge, Franklyn, ed., History of Rice and Steele Counties (Chicago, 1910). Two volumes.

Curtiss-Wedge, Franklyn, ed., History of Winona County (Chicago, 1913). Two volumes.

Curtiss-Wedge, Franklyn, ed., History of Wright County (Chicago, 1915). Two volumes.

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Fuller, Clara K., History of Morrison and Todd Counties (Indianapolis, 1915). Two volumes.

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Hancock, Joseph W., Goodhue County, Minnesota, Past and Present (Red Wing, Minnesota, 1893).

Hennessy, William B., Past and Present of St. Paul (Chicago, 1906).

History of Goodhue County (Red Wing, Minnesota, 1878).

History of Mower County (Mankato, Minnesota, 1884).

History of Rice County (Minneapolis, 1882).

History of Steele and Waseca Counties (Chicago, 1887).

History of the Red River Valley, Past and Present (Grand Forks, North Dakota, and Chicago, 1909). Two volumes.

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History of Winona and Wabasha Counties (Chicago, 1884).

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- Hughes, Thomas, History of Blue Earth County (Chicago, 1909).
- Illustrated Album of Biography of Meeker and McLeod Counties (Chicago, 1888).
- Illustrated Album of Biography of Pope and Stevens Counties (Chicago, 1888).
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- Larson, Constant, ed., History of Douglas and Grant Counties (Indianapolis, 1916). Two volumes.
- Lawson, Victor E., Illustrated History and Descriptive and Biographical Review of Kandiyohi County (St. Paul, 1905).
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- Mitchell, W. H., Dakota County. Its Past and Present (Minneapolis, 1868).
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- Moyer, L. R., and O. G. Dale, History of Chippewa and Lac qui Parle Counties (Indianapolis, 1916). Two volumes.
- Neill, Edward D., and Charles S. Bryant, History of Fillmore County (Minneapolis, 1882).
- Neill, Edward D., and Charles S. Bryant, History of the Minnesota Valley (Minneapolis, 1882).
- Neill, Edward D., and J. Fletcher Williams, History of Ramsey County and the City of St. Paul (Minneapolis, 1881).
- Rasmussen, Christian A., History of Goodhue County (Red Wing, Minnesota, 1935).
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- Rose, Arthur P., Illustrated History of Jackson County (Jackson, Minnesota, 1910).
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- Rose, Arthur P., Illustrated History of Yellow Medicine County (Marshall, Minnesota, 1914).
- Shutter, Marlon D., History of Minneapolis (Chicago and Minneapolis, 1923). Three volumes.
- Smith, Abner C., Random Historical Sketch of Meeker County (Litchfield, Minnesota, 1877).
- Tasker, A. E., Early History of Lincoln County (Lake Benton, Minnesota, 1936).

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Maps, Plats, and Atlases

The use of maps in a study of the development of a road system of any given region is necessary, for they serve not only to delineate the lines of travel, but also to demonstrate the progressive development of the system of communication. Maps and plats of Minnesota and its component parts consulted in the preparation of this study, range, from the standpoint of time of preparation, from about 1820 to 1921. They have included fine lithographs, blueprints, photographs and photostats, and originals. Some of them are carefully and artistically drawn by competent draftsmen according to scale; some are the rough field sketches of the engineers or sur-

veyors who laid out the roads.

The officers of the corps of topographical engineers of the United States army who laid out and superintended the construction of the military roads in Minnesota made accurate plats of the roads under their supervision. These were filed in the office of the topographical engineers in St. Paul, and copies of them were forwarded to the office of the colonel of topographical engineers in Washington. The field notes and rough sketches or plats of many of these roads, and of other roads as well, are to be found in the Alfred J. Hill Papers in the possession of the Minnesota Historical Society. Hill, employed as a draftsman in the St. Paul office for a time in the late fifties, drew sketches from these notes, and in 1859 prepared a complete map of the government roads in Minnesota which is on file in the War Department Archives in Washington. A photostatic copy is in the possession of the Minnesota Historical Society. The plat of the military road from Duluth to Vermillion Lake may be found in the St. Louis County Historical Society at Duluth, and a copy of it is in the possession of the Minnesota Historical Society. When the federal government undertook the survey of the public lands in Minnesota, the surveyors were instructed to record upon their plats the locations of all roads and trails that they found as well as the natural features of the land. As a result, the earliest

trails in the Minnesota country often can be traced through the land survey plats. As a part of a WPA project sponsored by the Minnesota Historical Society, the routes of the series of trails which led to the Red River settlements are being traced from the land survey plats in the office of the secretary of state of Minnesota. The printed reports of United States and Minnesota officials in charge of roads in the state usually were accompanied by maps showing the condition of the government roads. Since these documents are cited elsewhere, they are not repeated here. They may be located by consulting the reports for the years indicated.

Territorial law required the engineers or surveyors who laid out territorial roads to deposit copies in the office of the territorial secretary, and copies of the portions extending through the various counties of the territory in the office of the county clerk of the respective counties. Similarly, plats of county roads were to be deposited in the office of the county clerk by the county surveyors. The same system was followed after statehood was attained in Minnesota, and plats of the roads laid out, whether by the county or state, had to be deposited in the office of the county auditor. In many cases, these plats are in existence today, and the recent inventory of county archives conducted as a WPA project has disclosed the whereabouts of many thought

to have been lost.

The printed maps which were distributed by commercial publishers were based on these plats. Those which were found to be most useful in the study of road development are listed below. This list is by no means complete, for literally hundreds of maps have been published. County atlases have been published for most Minnesota counties, showing in detail the routes of roads within the counties at the time the atlas was published. Similarly, the trail associations which were organized in Minnesota during the second decade of the twentieth century published road maps to show the course of the trails, and numerous civic organizations interested in the development of particular localities or regions followed a similar practice of publishing maps of the region. The listing is chronological.

John Pope, Map of the Territory of Minnesota (1849). Shows route of expedition to the Red River by Pope in 1849, two of the Red River trails, and routes of military explorations in Minnesota.

Minnesota (J. H. Colton and Company, publishers, New York, 1855). Shows in some detail the Mendota-Wabasha road, the Point Douglas-Fort Ripley road, the Point Douglas-St. Louis River road, the Swan River road, and the Read's Landing-Mankato road. The map is distorted, but graphic.

J. Knauer, Sectional Map of the Territory of Minnesota (J. H. Colton and Company, publishers, New York, 1855). Shows roads but the scale is somewhat distorted.

Chapman's New Sectional Map of Minnesota (Silas Chapman, publisher, Milwaukee, 1856). Shows many of the roads. There is some disagreement, however, with the Chapman map published by Kempshall in the same year.

Chapman's New Sectional Map of Minnesota (Dyer and Pasmore, publishers, Milwaukee, 1856). Better than any of the other maps of 1856, particularly with regard to the roads from St. Cloud and Little Falls to Mille Lacs and thence to Superior. Roads in southeastern Minnesota are very clearly shown.

Chapman's New Sectional Map of Minnesota (Henry Kempshall, publisher, Milwaukee, 1856). Shows most of traveled routes in Minnesota in 1856, although not always accurately.

C. Meyer and H. Von Minden, Map of Minnesota Compiled from the United States Surveys (1856). Excellent map, but not all roads are shown.

J. H. Young, Map of Minnesota Territory (Charles Desilver, publisher, Philadelphia, 1857). Shows many of the most important roads, but only one Red River trail -- the Crow Wing route.

Sectional Map of the Surveyed Portion of Minnesota and the North Western Part of Wisconsin (J. S. Sewall, publisher, St. Paul, 1857). Excellent for roads in southeastern Minnesota.

Map of Freeborn County (1860). Published in the Freeborn County Standard (Albert Lea), March 20, 1861. Shows the trails in the county.

Sectional Map of the Surveyed Portion of Minnesota and the North Western Part of Wisconsin (J. S. Sewall and C. W. Iddings, publishers, St. Paul, 1860).

J. S. Sewall, Sectional Map of the Surveyed Portion of Minnesota and the North Western Part of Wisconsin (Ensign, Bridgman and Fanning, publishers, New York, 1860). Same as the map published by Sewall and Iddings.

Minnesota (J. H. Colton and Company, publishers, New York, 1864). Shows roads, but not according to scale.

J. S. Sewall, Sectional Map of the Surveyed Portion of Minnesota and the North Western Part of Wisconsin (St. Paul, 1864). Based on Sewall's map of 1857 but has additions. Very good.

Chapman's Sectional Map of the Surveyed Part of Minnesota (Silas Chapman, publisher, Milwaukee, 1865). The foreword to the map contains this statement: "The common and post roads have been entirely omitted from the map. The routes of inland travel in a new State

are so constantly changing that no permanent reliance can be placed upon them. . . . Which road will be best for him [a traveler] to take, must be learned at the place itself. No map can possibly give this information for him."

J. S. Sewall, Sectional Map of the Surveyed Portion of Minnesota and the North Western Part of Wisconsin (D. D. Merrill and Company, agents, St. Paul, 1866). Good. Shows most of the roads. Based on 1857 map.

J. S. Sewall, Sectional Map of the Surveyed Portion of Minnesota and the North Western Part of Wisconsin (St. Paul, 1869). Good and up to date.

Chapman's Sectional Map of the Surveyed Part of Minnesota (Silas Chapman, publisher, Milwaukee, 1871). Shows the roads in the western frontier region.

Chapman's Sectional Map of the Surveyed Part of Minnesota (Silas Chapman, publisher, Milwaukee, 1872). Good for frontier regions of western part of the state.

✓ Illustrated Historical Atlas of the State of Minnesota (A. T. Andreas, publisher, Chicago, 1874). Contains county maps which show roads in detail.

✓ New Sectional Map of Northern Minnesota (Jewett and Son, publishers, St. Paul, 1894). Based on government surveys. Shows in detail the principal roads in area north of a line drawn due east and west along the southern boundary of Grant and Douglas counties. Excellent for the period.

Department of the Interior, Office of Indian Affairs, Map of White Earth Indian Reservation, Minnesota (1911). Shows roads in reservation very clearly.

Mendenhall's Guide and Road Map of Minnesota (C. S. Mendenhall, publisher, Cincinnati, 1914). Shows automobile roads.

Minnesota Highway Improvement Association, Inc., Map of Babcock Plan for a Trunk Highway System in Minnesota (1919). Illustrates roads which were included in the trunk highway system.

Clason's Guide Map of Minnesota (Clason Map Company, publishers, Denver, 1920). Shows roads marked by trail associations, together with the emblems of the different groups.

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