The PALIMPSEST

Union Pacific Freight Heading West from Omaha

Great Northern—Union Pacific—Santa Fe

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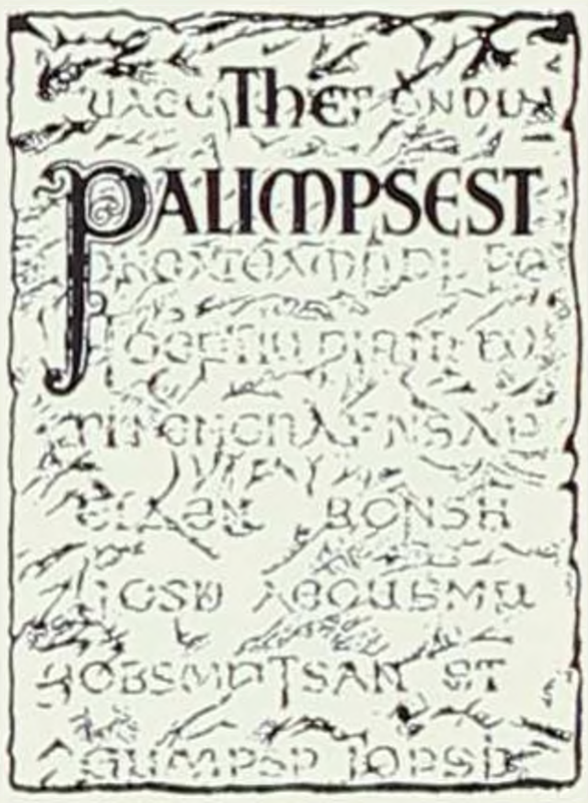

The Meaning of Palimpsest

In early times a palimpsest was a parchment or other material from which one or more writings had been erased to give room for later records. But the erasures were not always complete; and so it became the fascinating task of scholars not only to translate the later records but also to reconstruct the original writings by deciphering the dim fragments of letters partly erased and partly covered by subsequent texts.

The history of Iowa may be likened to a palimpsest which holds the record of successive generations. To decipher these records of the past, reconstruct them, and tell the stories which they contain is the task of those who write history.

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GREAT NORTHERN — UNION PACIFIC SANTA FE

FRANK P. DONOVAN

Illustrations

All illustrations were collected by Mr. Donovan from the various sources credited. The Union Pacific and Santa Fe loaned the colored pictures appearing on the front and back cover.

Author

Frank P. Donovan is the author of *Mileposts on the Prairie*. He has written articles on the Minneapolis & St. Louis, the Chicago Great Western, Interurbans in Iowa, the Manchester & Oneida, Harry Bedwell — Railroad Raconteur, Iowa Railway Historical Museum, the Illinois Central in Iowa, the North Western in Iowa, the Rock Island in Iowa, the Milwaukee in Iowa, and the Wabash in Iowa, all appearing in previous issues of THE PALIMPSEST.

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THE PALIMPSEST

EDITED BY WILLIAM J. PETERSEN

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The Great Northern in Iowa

In the late 1880's, Sioux City was well supplied with railroads which radiated in nearly every direction. But the packers and other industrialists wanted to have an independent and a more direct route to Duluth which would avoid the traffic congestion of the Twin Cities. They felt that better connections with the Lake Superior port would bring more manufactured goods to their city at lower cost. Again, a new railroad northward would cross the two transcontinentals serving the Pacific Northwest; and by so doing, Sioux City would get increased shipments of grain and livestock.

To achieve this end local businessmen formed the Sioux City & Northern Railroad, which was chartered October 3, 1887. It was projected from Sioux City northeastward to Duluth, and from the Iowa line northwestward to Minot, North Dakota. Whether the incorporators ever seriously thought of reaching Minot is a matter of conjecture. If the plans were nebulous at the start, the

backers soon faced reality by electing to build to the most convenient connection to form a through route to Duluth. This proved to be Garretson, South Dakota, on a railroad which James J. Hill headed.

Once the decision was made, management acted quickly. In June 1889, the project existed only on paper; six months later it was an operating railroad just short of one hundred miles long. On January 27, 1890, the 96-mile route was opened for its entire length. Two factors did much to expedite its progress: ready capital and competent management.

From the start the line was a Sioux City enterprise locally owned and operated. At the outset, it was headed by a veteran railroad builder, with a versatile and experienced Englishman as general manager. A third key officer was an enterprising financier who originally held the office of treasurer. These three officers served in chronological sequence as president of the thriving new railroad. Each had an interesting and varied background.

Thomas P.Gere, first president of the operating railroad, came from Wellsburg, New York, where he was born in 1842. When still a boy his parents moved to the Midwest, and his education was obtained in various communities where the family resided. At the outbreak of the Civil War he enlisted in the Fifth Regiment, Minnesota Volunteers. Mustered out a brigade adjutant, Gere was

presented a medal of honor by Congress in 1865.

The next two decades he spent in railroad building. He helped survey what is now the River Division of the Milwaukee in Minnesota and later worked as a "leveler" on a predecessor line of the Omaha Road in Wisconsin. By 1867 he was assistant engineer of the Minnesota Valley and later of the St. Paul & Sioux City railroads, all of which were forerunners of the "Omaha." With the formation of the Chicago, St. Paul, Minneapolis & Omaha Railway ("the Omaha Road") in 1880, he became superintendent of the St. Paul Division. Two years later he was appointed assistant superintendent of the entire railroad.

Gere resigned from the Omaha in 1883 and subsequently formed a partnership with R. D. Hubbard of Mankato, Minnesota, in organizing the Sioux City Linseed Oil Works. For many years he managed that firm's Sioux City plant. But railroading was still in his blood. When the Milwaukee was built from Manilla to Sioux City, he had a hand in its construction. Gere, likewise, aided in bringing the North Western's Maple River branch into Onawa and in organizing the Pacific Short Line. All in all, he was a logical person to head and direct the building of the Sioux City & Northern.

Gere's general manager, Frederick C. Hills, was also a man of parts. He, likewise, was born in 1842, only he came from Bethersden, Kent, Eng-

land. At the age of seven, young Frederick's parents emigrated to America and settled in Oneida County, New York. Frederick worked on his father's farm until he was 15. Then he became an apprentice in the carriage trimming trade. Eager for more education, he enrolled in a Rome business college, but upon the outbreak of the Civil War he enlisted in the army. Because of a physical disability his military career was cut short, and he went west to seek his fortune.

In the spring of 1864, Frederick Hills came to Sioux City from the railhead at Marshalltown with a yoke of cattle. Soon he was back in Marshalltown packing wood for what is now the North Western railroad. Then he had a stint at clerking further west but returned to the railroad as local agent in Boone. When the road built further westward, this ambitious Anglo-American lad was sent to open the station at Missouri Valley Junction in December 1866. Soon the carrier, then known as the Sioux City & Pacific, reached Sioux City; and the young man became its local agent. He had risen on John I. Blair's road to the position of general traffic manager when he left its employ in 1881.

For the next seven years, Hills was engaged in the hardware trade in Sioux City. In 1888, however, he sold his business to become assistant general manager of the Wyoming Pacific Improvement Company, builders of the Pacific Short Line.

The Short Line subsequently became the Sioux City, O'Neill & Western, which later was headed by his associate — Arthur S. Garretson. When the successor road went bankrupt following the Panic of 1893, Hills was appointed receiver.

Prior to this Hills helped to promote the Sioux City & Northern, became its general manager, and was afterward its president. For many years the British-born executive with his great flowing beard was a prominent figure in Sioux City railroading. The town of Hills, Minnesota, on the road he operated, is named for him.

The third of the trio who headed the Sioux City & Northern was Arthur S. Garretson. Banker, business man, and rancher, he was another of the many-sided pioneers associated with the development of Sioux City. For several years he held the office of treasurer of the new railroad until he succeeded Hills to the presidency in 1893.

Besides his railroad commitments Garretson was cashier of the Sioux National Bank and owner of a 3,000-acre cattle ranch in Grange Township near Luton. He also helped promote the city's widely publicized "elevated railroad" and served as treasurer of the newly-organized University of the Northwest, now Morningside College. Garretson, South Dakota, honors his name.

The new railroad was constructed by the Sioux City & Northern Contracting Company and was controlled by Garretson and other local men. The

contracting firm received the railroad's stocks and bonds at the rate of $15,000 and $20,000 respectively per mile of road, an aggregate of $3,360,000.

The Sioux City & Northern ran in a generally northward direction, paralleling the Illinois Central along the Floyd River to Merrill. From that town it continued northward into the more hilly country, through Struble, Sioux Center, and Doon to the State Line south of Hills, Minnesota. The next 17 miles were divided between the southwestern corner of Rock County, Minnesota, and the eastern part of Minnehaha County, South Dakota. Its northern terminus was at Garretson, where it connected with the Willmar & Sioux Falls Railway, which was headed by James J. Hill. The Hill road extended from Willmar, Minnesota, through Garretson and Sioux Falls to Yankton, South Dakota, a distance of 209 miles. The Sioux City & Northern was laid with 60-pound rails; and its shops and headquarters were located in Sioux City.

The company encountered no serious obstacles in building the line except at Maurice, where the North Western sought to prohibit it from crossing at the same grade. The North Western contended, before the Board of Railroad Commissioners, that the location in question was at the foot of a one per cent grade in each direction, making it difficult to start and stop trains. Furthermore, it maintained that the curvature of its line was so

great that the proposed grade crossing would be obscured in both directions. After hearing all arguments, the Board directed the Sioux City & Northern to build a bridge across the North Western's line; and the latter road was ordered to lower its track under the proposed bridge. Both roads complied with the order, thereby making a grade crossing unnecessary.

By 1892 the tri-state railroad had 12 locomotives, 9 passenger train cars, 470 freight cars, 5 cabooses, and 2 other cars. A tally of 100 stock cars and 50 refrigerator cars would suggest cattle and packing-house products were important items of revenue.

To strengthen its position in Sioux City's highly competitive packing district, an affiliated enterprise was chartered in 1889. Called the Sioux City Terminal & Warehouse Company, it soon had 13 miles of track together with ample storage facilities and served as a valuable adjunct to its larger affiliate. It was leased to the Sioux City & Northern at an annual rental of $90,000. For many years Garretson headed the Terminal Company.

There was a curious affinity between the Sioux City & Northern and the less successful Sioux City, O'Neill & Western Railway. As we have seen, both Frederick Hills and Arthur Garretson were associated with the latter road. Indeed, for a very brief period the two lines were jointly oper-

ated with identical officers for both concerns. The O'Neill line was subsequently operated separately from the Sioux City & Northern and then in an equally curious manner, as we will see later, it came back into the fold.

Through its decade of independent existence, the Sioux City & Northern was rooted in the economy of Iowa's growing packing community. James E. Booge, who was a director and later vice president of the road, opened Sioux City's first packing plant in 1871. As his plant expanded so did the distribution of his products over the Sioux City & Northern. Then, too, D. T. Hedges, a very prosperous grocer and first president of the Union Stock Yards Company, was an influential director of the road and a heavy shipper. The Sioux City & Northern had connections figuratively, literally, and physically. Small wonder that its high ratio of 5.06 cars for each mile of line was more than justified.

Shortly after the road reached Garretson a 30-year traffic contract was made with the Hill road at that point. This apparently was so advantageous that no plans for further extensions were broached. Traffic flowed between the two roads in increasing amounts to the satisfaction of each. The Sioux City & Northern operated at a profit from the start.

The heady prosperity which characterized Sioux City's growth during the late 1880's and early

1890's, however, was not to last. The Panic of 1893 wreaked havoc on the city and its industrial growth with greater toll than the periodic floods of the Missouri River ever did. Trouble came later to Sioux City than to many metropolitan centers of the East. But when it came, it was with devastating swiftness.

At one p.m. on April 25, 1893, Hedges, who was reputed to be the wealthiest man in town, assigned all his property to his creditors. Minutes later the Union Loan & Trust Company, which held the paper of many industries and railroads, declared itself insolvent. The Sioux City & Northern bravely held out until October, when Warwick Hugh, of St. Louis, and Samuel J. Beals, of Sioux City, were made co-receivers.

The spectacular Corn Palace of 1890, to which Garretson is said to have underwritten the cost of a special train bringing prominent capitalists from Boston, would be rebuilt only once more. Likewise the city's famed elevated railway, which was backed by Garretson, Booge, and others and was proudly heralded as the third such facility in the world, now became a white elephant. It continued to go deeper into the red until 1897 when that "Wonder of the West" went the way of the corn palaces. Slowly and painfully the city recovered from the leveling depression. But the gusty, lusty boom times of the 1880's were never to be repeated.

While the Sioux City & Northern floundered in receivership, new names appeared on the directorate. Local men were replaced by outsiders, principally from the Twin Cities. There was W. P. Clough, of St. Paul, for example, who appeared in 1895 along with two others from the Twin Cities. To the average Sioux Citian these names meant nothing. But to financiers and railroad management they spelled out Great Northern, for Clough was vice president of that road. Jim Hill probably had an eye on the Sioux City gateway when he made an early traffic agreement with the Sioux City & Northern. Apparently he did not show his hand until the railroad very conveniently went bankrupt. That made getting control a simple and relatively inexpensive matter.

In 1900 Hill garnered the Sioux City road into his rapidly expanding rail domain. He did this by having the Willmar & Sioux Falls Railway acquire the Sioux City & Northern along with the Sioux City, O'Neill & Western. The latter road extended from South Sioux City (opposite Sioux City) to O'Neill, Nebraska, a distance of 129 miles. Doubtless it had trackage rights over the Omaha Road's bridge across the Missouri River, making a through route from Garretson via Sioux City to O'Neill.

The O'Neill line, however, never fitted very well into the Great Northern system. Hill preferred to keep his branch lines in the Dakotas all

within the eastern boundary of the Missouri River. For this reason the Nebraska excrescence was later sold to the Burlington, and it is being operated by that road as a secondary line to this day.

Now that Hill had purchased the Sioux City & Northern, he proceeded to integrate it into his far-flung system. Freight was speeded up by eliminating much of the interchange delay in Garretson and better co-ordinating through service to the Twin Cities and Duluth.

For passengers, through coaches were run between Willmar and Sioux City via Garretson. It is interesting to note that at one time there was through service from Duluth to Sioux Falls, calling at Willmar, Garretson, and other local points. Possibly a Sioux City car was included in the consist, although this has not been verified.

In 1907 the Willmar & Sioux Falls Railway was purchased outright by the Great Northern, and the former name disappeared from the rolling stock and letterheads. Meanwhile, the Sioux City branch had been upgraded over the years with heavier rail and better equipment. The once-popular American Standard had been replaced by the more powerful Pacific type locomotive. A typical example of the latter engine has been preserved for posterity and is on permanent exhibit in Sioux City. This 4-6-2 type locomotive, No. 1355, was donated to the city by the railway and stands beside the tracks in a fenced enclosure.

Up until displacement by diesels, time freights were powered by well-kept Mikados, some of which had capacious Vanderbilt tenders riding on six-wheel trucks. By 1951 steam had practically disappeared from the Sioux City line, although the faithful old Mikes were again called into service during the floods of June 1953. They could operate with a foot of water on the tracks, whereas diesels were out of service if it reached a few inches over the rails.

The mainstay of passenger service between Sioux City and Willmar were trains 31 and 32 for day operation and Nos. 51 and 52 for overnight runs. No. 31 whistled for Sioux City late in the evening, whereas its eastward counterpart No. 32 highballed out of town early in the morning. The "night trains" ran in the daylight hours on the Iowa segment of the run, arriving around noon and departing about supper time. Mail was especially heavy on the night run, and much of it was posted to or from the Twin Cities. All passenger trains used Sioux City Union Station, which was owned and operated by the Great Northern Railway.

Diesel power was introduced relatively early on the night trains. In November 1939, an EMD type NW-3 unit bearing road number 5400 was assigned to operation of Nos. 51 and 52, replacing 4-6-2 and 4-4-2 type steam power. This stalwart diesel (later renumbered 175) chalked up over 2

million miles before it was relegated to local freight service from Minneapolis in 1952.

When passenger traffic dwindled as the use of automobiles increased, gas-electric motor cars were periodically used on the day runs. During the depression years of the 1930's, trains 31 and 32 disappeared from the timecard. Thanks to a healthy head-end revenue, principally from United States mail, overnight service continued until February 18, 1960. On that day Engineer David Munro, of Sioux City, pulled the last scheduled Great Northern passenger train out of that community.

Freight service, on the other hand, continues to be heavy, and four and five unit diesels are regularly run during peak movements. A daily time freight is carded in each direction, and extras are run as traffic demands. Today, the 90 and 110-pound rail has replaced the original 60-pound steel, and facilities for trailer-on-flat-car and multi-level rack automobile loading are available in Sioux City.

We have seen that the Sioux City & Northern, predecessor of the Great Northern in Iowa, was a hometown road run by Hawkeye management. Although the Sioux City line can no longer be regarded as a local enterprise, two Great Northern presidents, under whom it operated or now operates, came from Iowa.

The first Iowan to head the Great Northern was

the late Ralph Budd. He was born on a farm near Washburn on August 20, 1879 and was one of six children. When Ralph was 13, the Budd family moved to Des Moines where he was educated at North High School and Highland Park College. After getting his degree he went with the Chicago Great Western ballasting track and relay rail between Des Moines and Oelwein. In 1902 young Budd shifted to the Rock Island and soon became first divison engineer on the new line being built between St. Louis and Kansas City.

Ralph Budd's engineering genius came to the attention of John Stevens, then vice president of the Rock Island and soon to be appointed chief engineer of the Panama Canal. Shortly after Stevens went to Panama he sent for Budd to rebuild the railroad paralleling the canal. Later, when Stevens was in the Pacific Northwest constructing railroads for James J. Hill, Budd was again summoned to be his right hand man. The Iowan acquitted himself well and rose to be chief engineer of the Oregon Trunk and later the Spokane, Portland, and Seattle railroads.

Meanwhile, Budd met James J. Hill, who although in his seventies, still dominated the policies of the Great Northern. The "Empire Builder" was impressed by Budd, and the latter, at the age of 33, was invited to become chief engineer and assistant to the president of Hill's prosperous transcontinental railroad. Ralph Budd rose rap-

idly on the Great Northern and was elected president in 1919 when he was only 40. He held that post until 1932, then he became president of the Burlington. On this road, he had an equally distinguished career. Upon his retirement in 1949, the Burlington was said to be "principally the 'lengthened shadow' of Ralph Budd."

The current and second Iowan to become president of the Great Northern is John M. Budd, son of Ralph Budd. John Budd was born in Des Moines, November 2, 1907, and was educated at the St. Paul and Phillips Exeter academies before entering Yale. The summer vacations of 1926 and 1927 found him working on the Great Northern as chainman with the engineering party on the Cascade Tunnel and Chumstick line changes. After receiving his B. S. degree in 1930, he returned to the Great Northern engineering department as assistant to the electrical engineer.

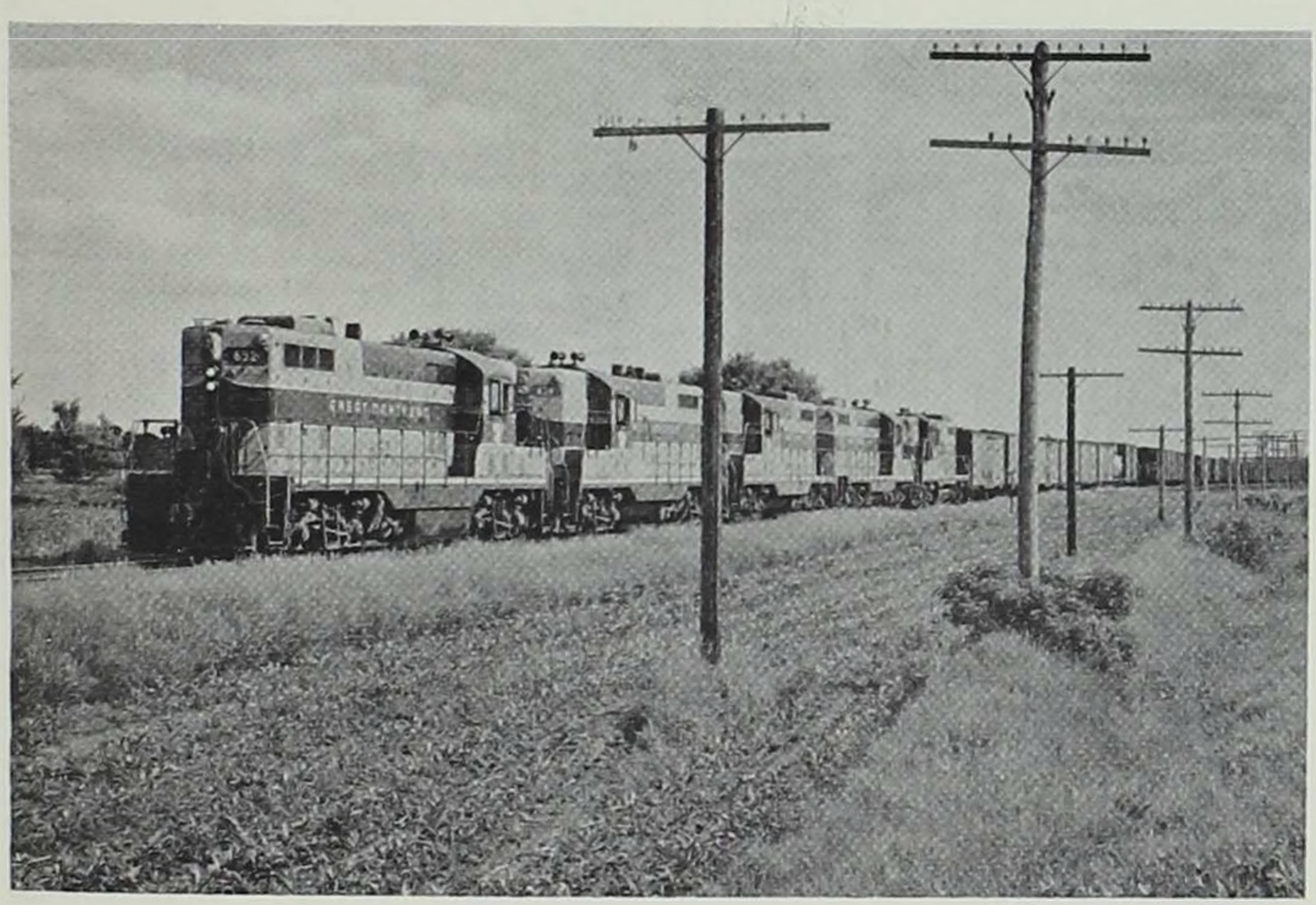
From 1933 to 1940, John Budd was assistant trainmaster and later trainmaster at various points on the extensive system. Sioux City was among the locales where he was stationed. Later he was made superintendent at Klamath Falls, Oregon, and afterward at Whitefish, Montana. His Great Northern employment was interrupted by World War II, but not his work at railroading, for he was a major and later lieutenant colonel in the Military Railway Service. After seeing active duty in Algiers, Italy, France, and Germany, he returned to

the Great Northern as assistant general manager of lines east of Williston, North Dakota.

John Budd left the Great Northern to head the Chicago & Eastern Illinois Railroad in 1947. Then 41, he was at that time the youngest president of any Class I railroad. In 1949 John Budd came back to the Great Northern as vice president of operation and held that position until elected president in 1951.

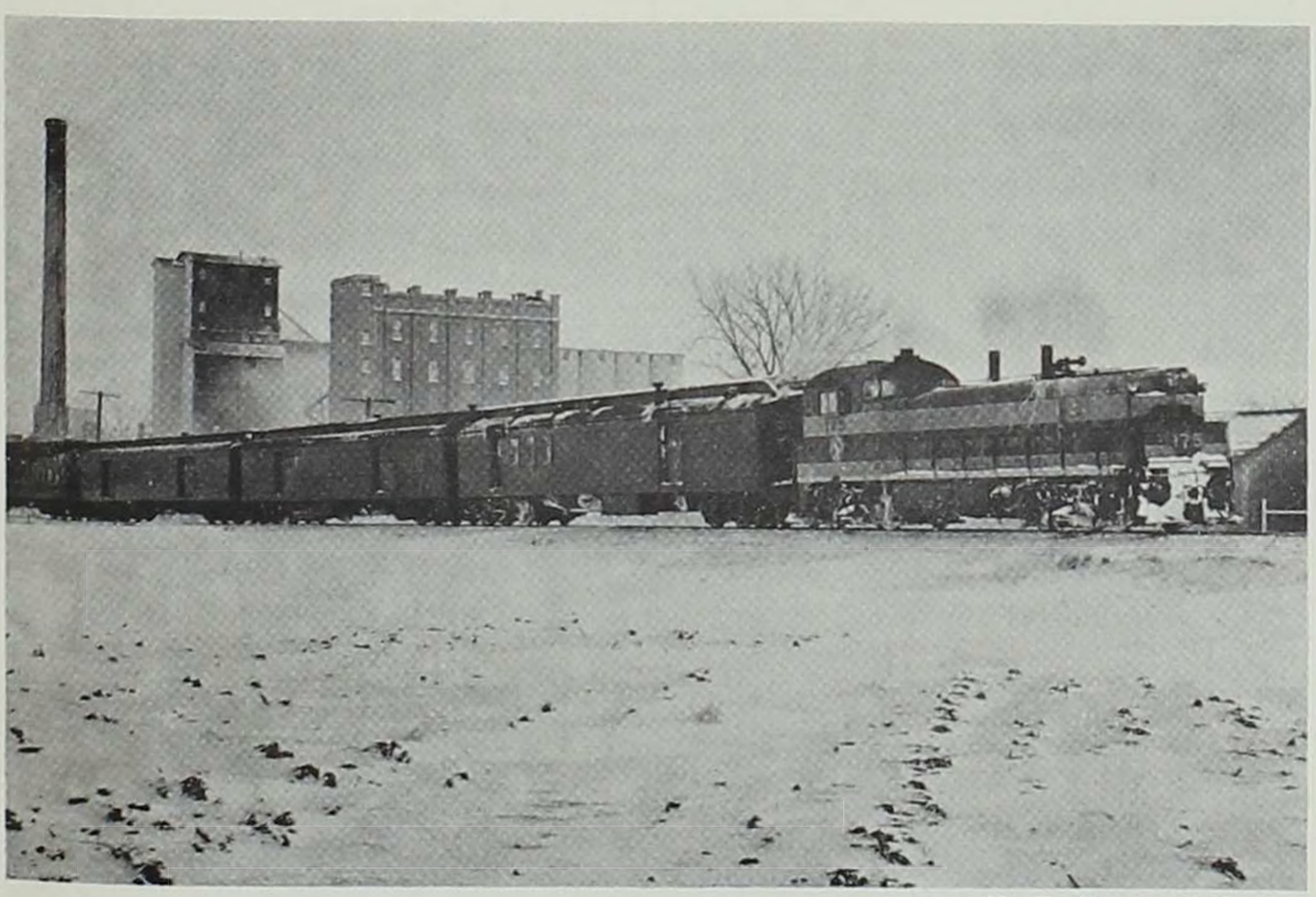
Thus the Sioux City line, the southernmost part of the Great Northern System, still retains a measure of its Iowa heritage and background.

GREAT NORTHERN



N. F. Priebe Collection

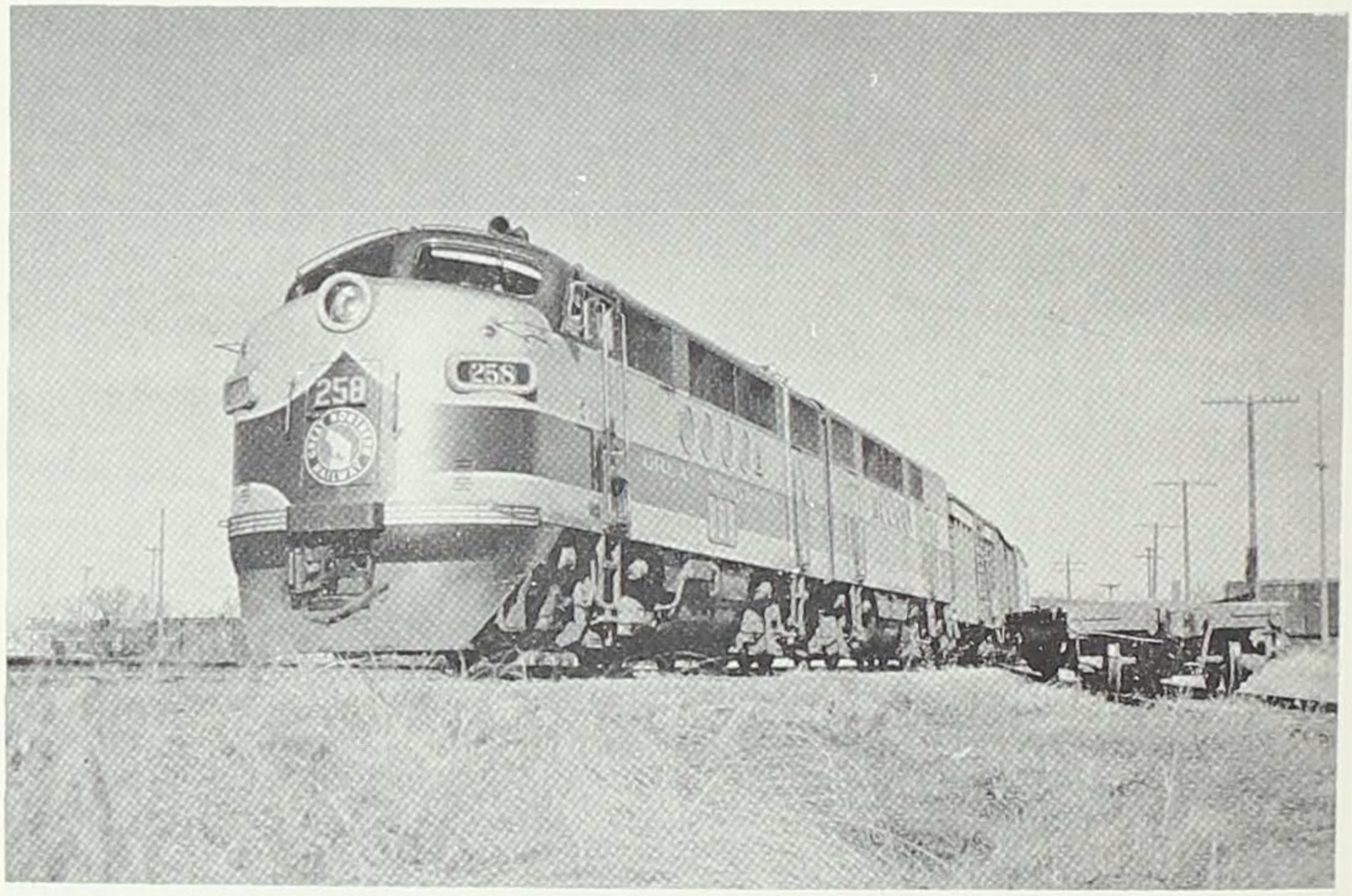
Time Freight No. 420 with five diesel units at Hinton. Train has just left Sioux City for its northeastward run for the Twin Cities and intermediate points.



N. F. Priebe Collection

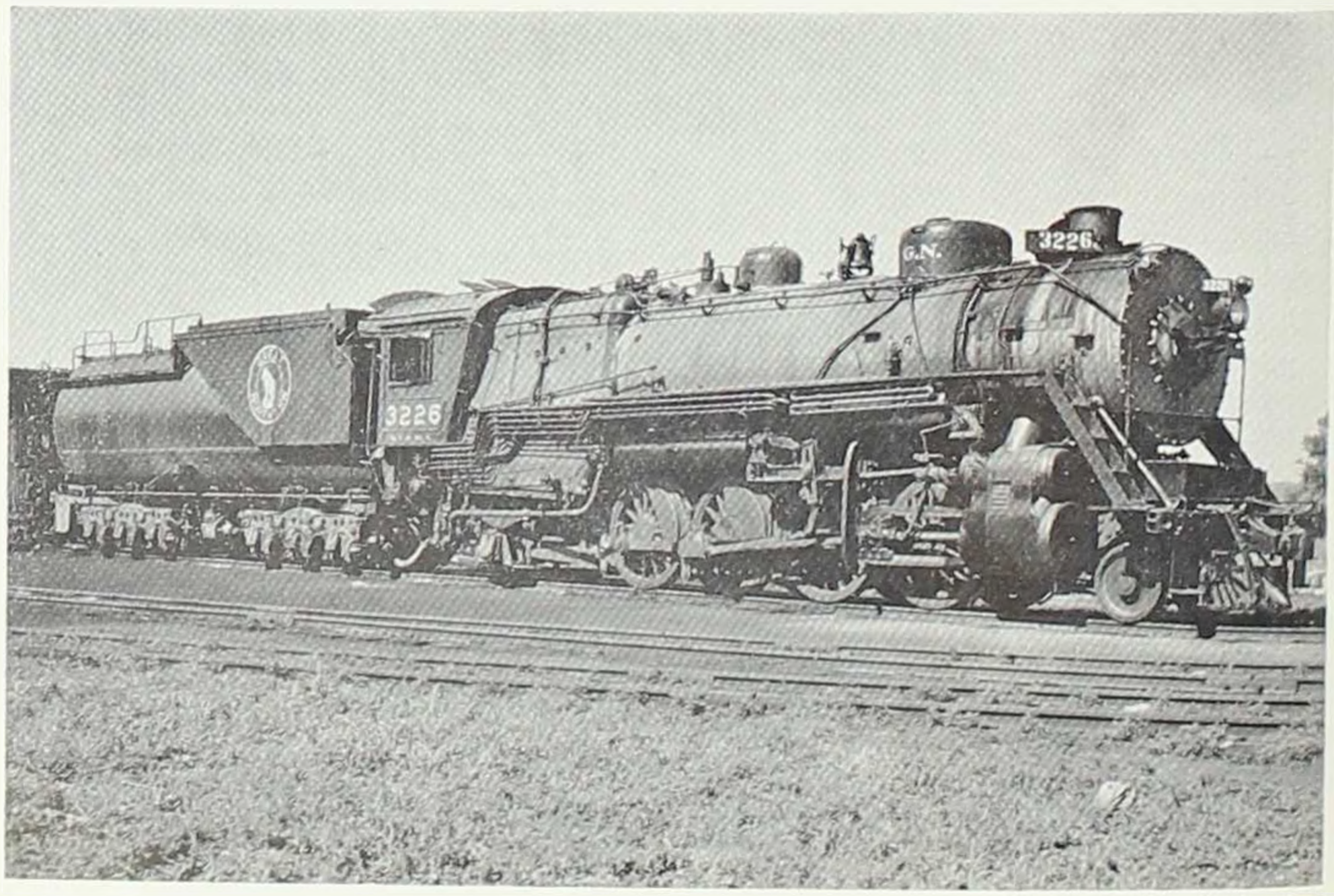
Sioux City-bound train pictured at Marshall, Minnesota, in December 1951, when it was several hours late due to inclement weather. Passenger service on this line was discontinued early in 1960.

GREAT NORTHERN



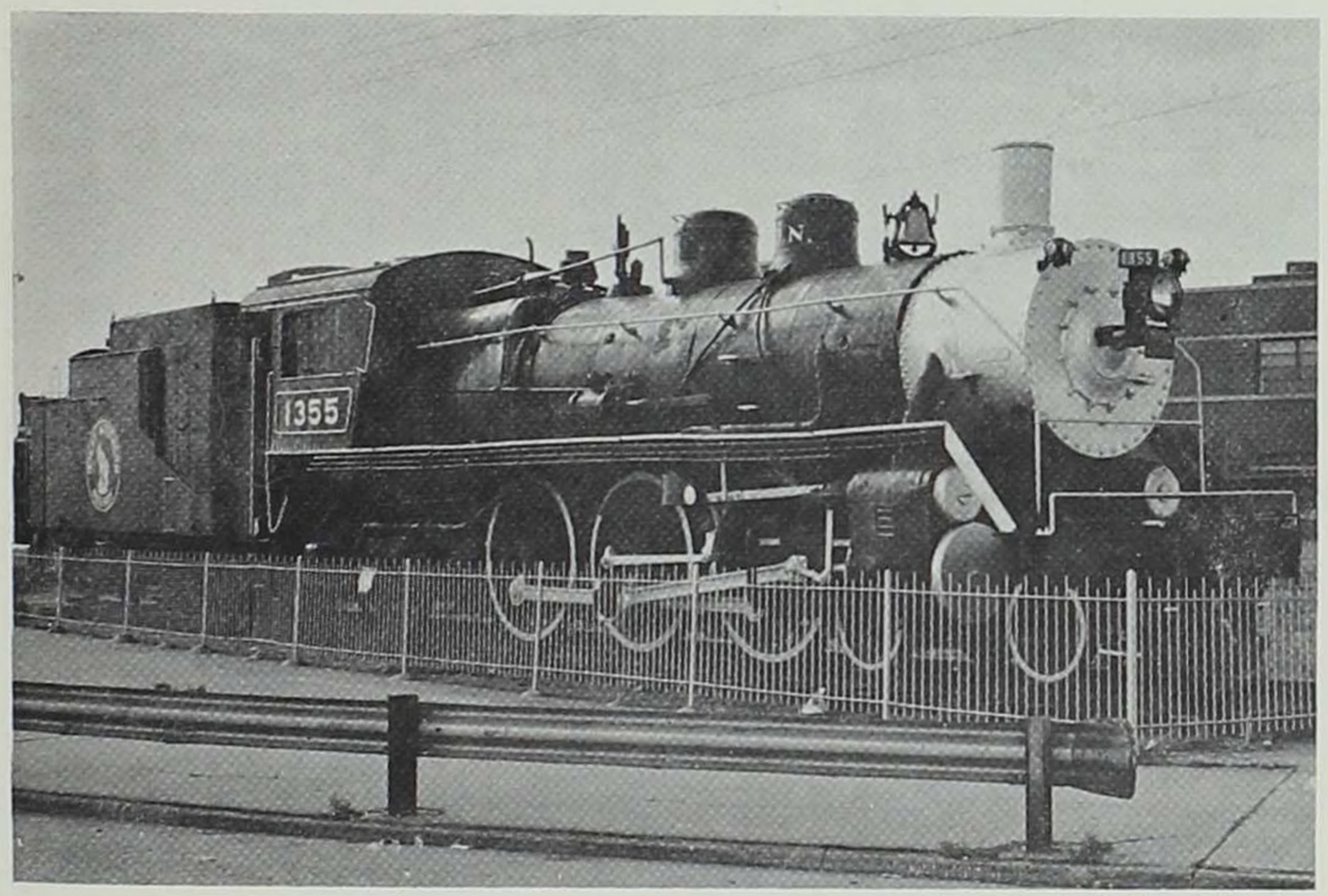
N. F. Priebe Collection

West bound time freight powered by 2-unit EMD type FT diesel at Marshall, Minnesota, en route to Sioux City.



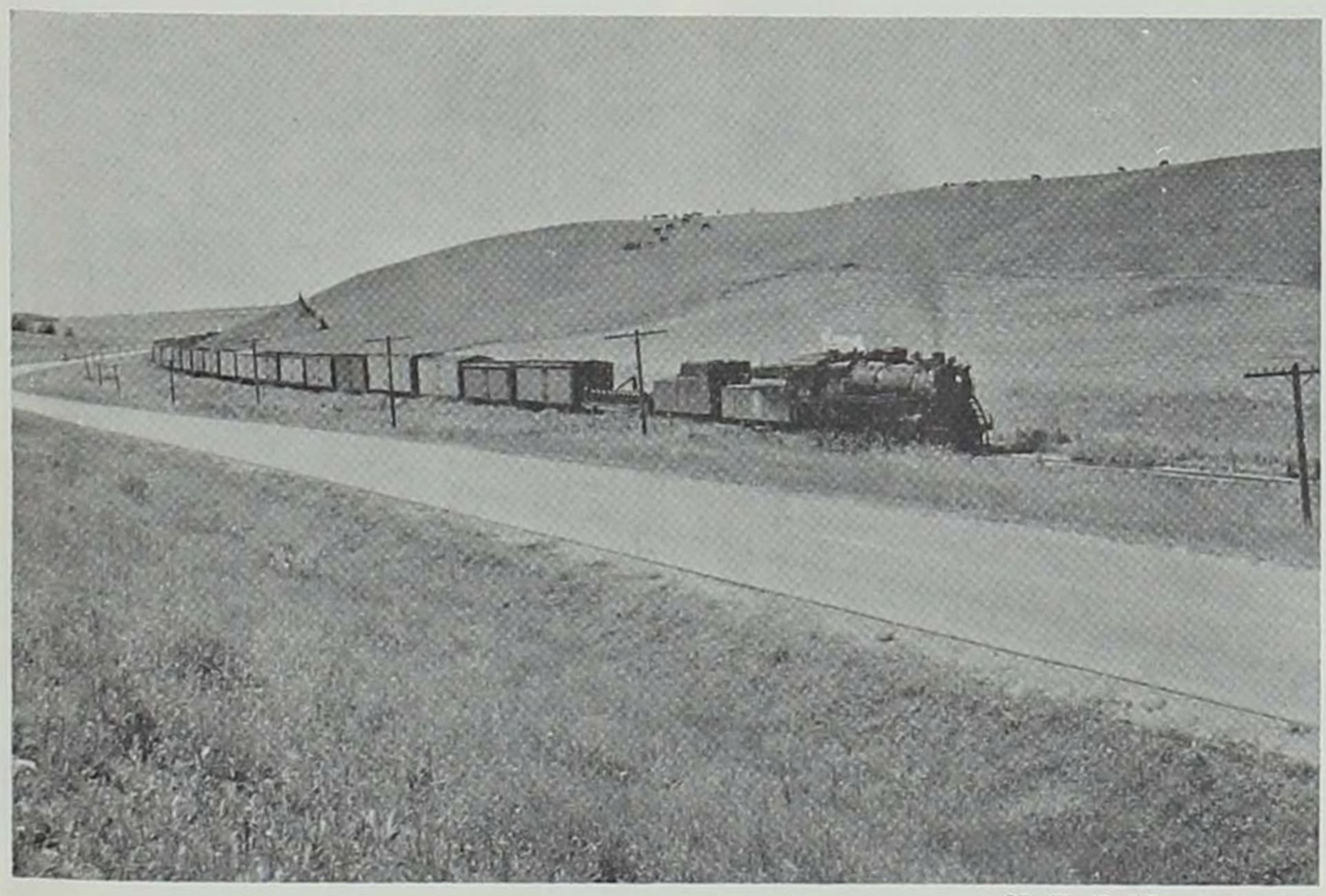
N. F. Priebe Collection

Mikado type locomotive shown at Sioux City in 1950. Engines of this design were formerly used on fast freights serving that city. Note six-wheel trucks on large tender.



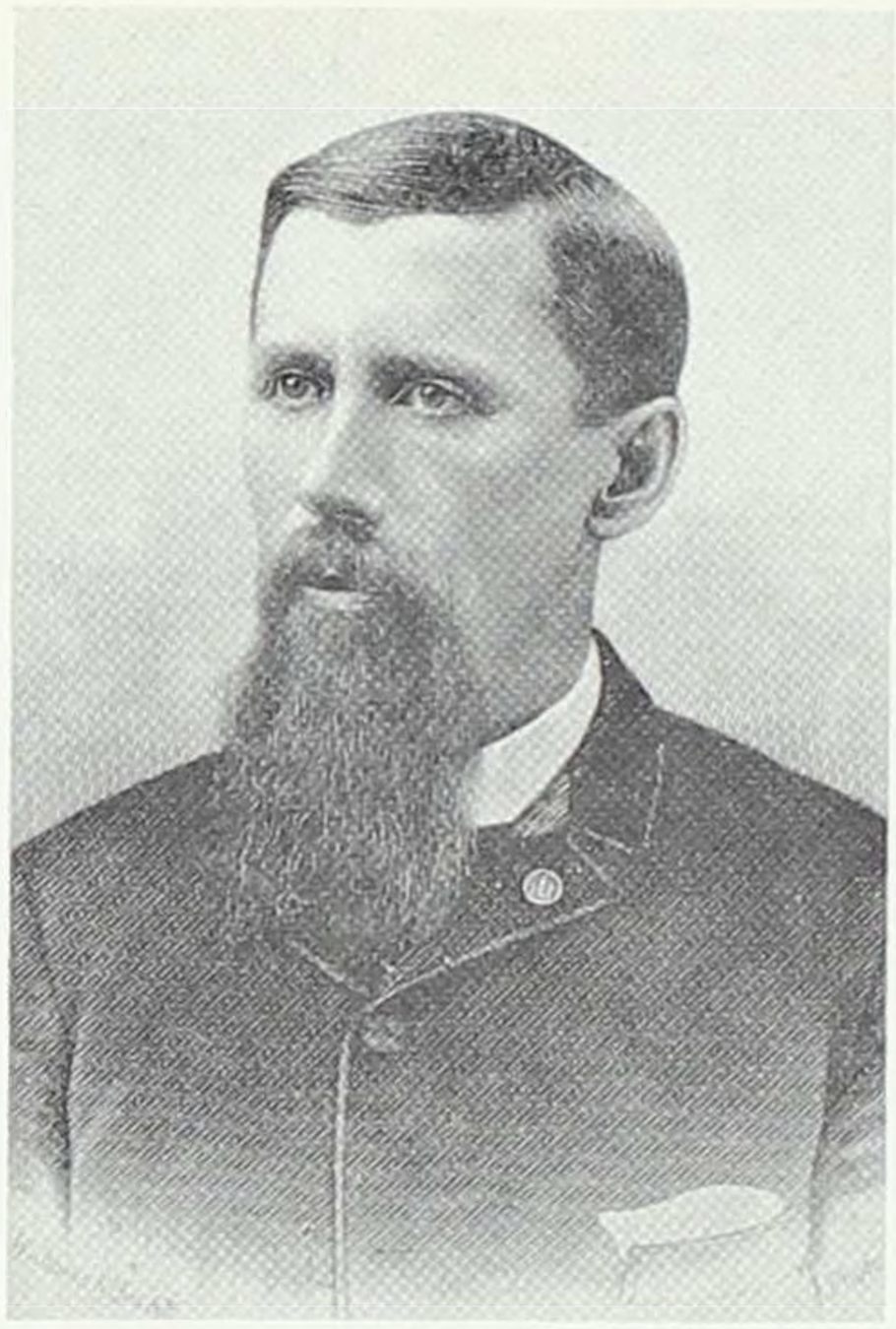
N. F. Priebe Collection

Old 1355 on permanent display in Sioux City. High-wheeler Pacifics like this one were once widely used in passenger service on the Great Northern's Iowa line and elsewhere on the system.



N. F. Priebe Collection

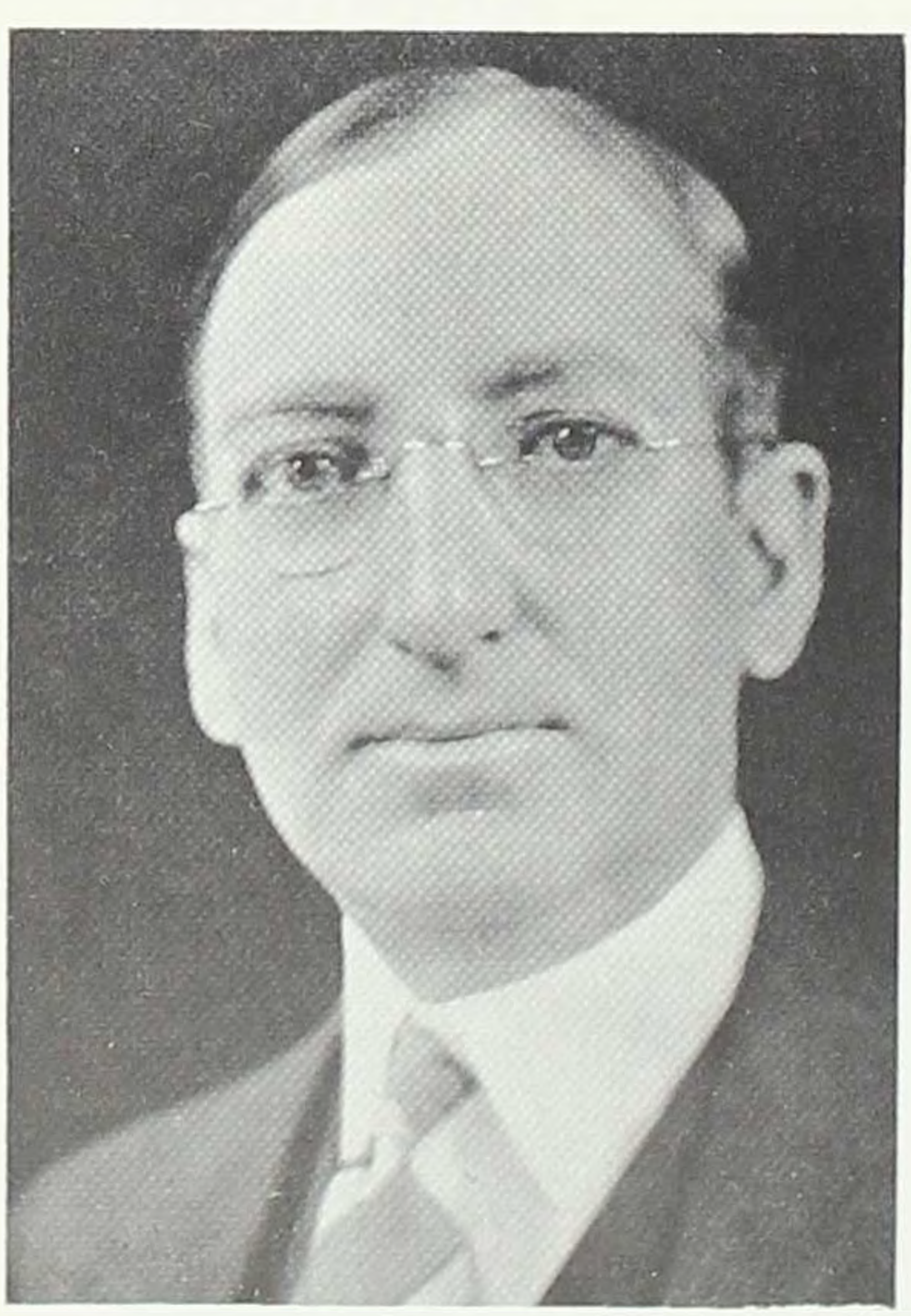
Eastbound extra freight, north of Holland, Minnesota, with refrigerator cars of meat from Sioux City. The rolling countryside with grazing cows is typical of the terrain in northwestern Iowa and western Minnesota, through which this train is running.



From History of the Counties of Woodbury and Plymouth

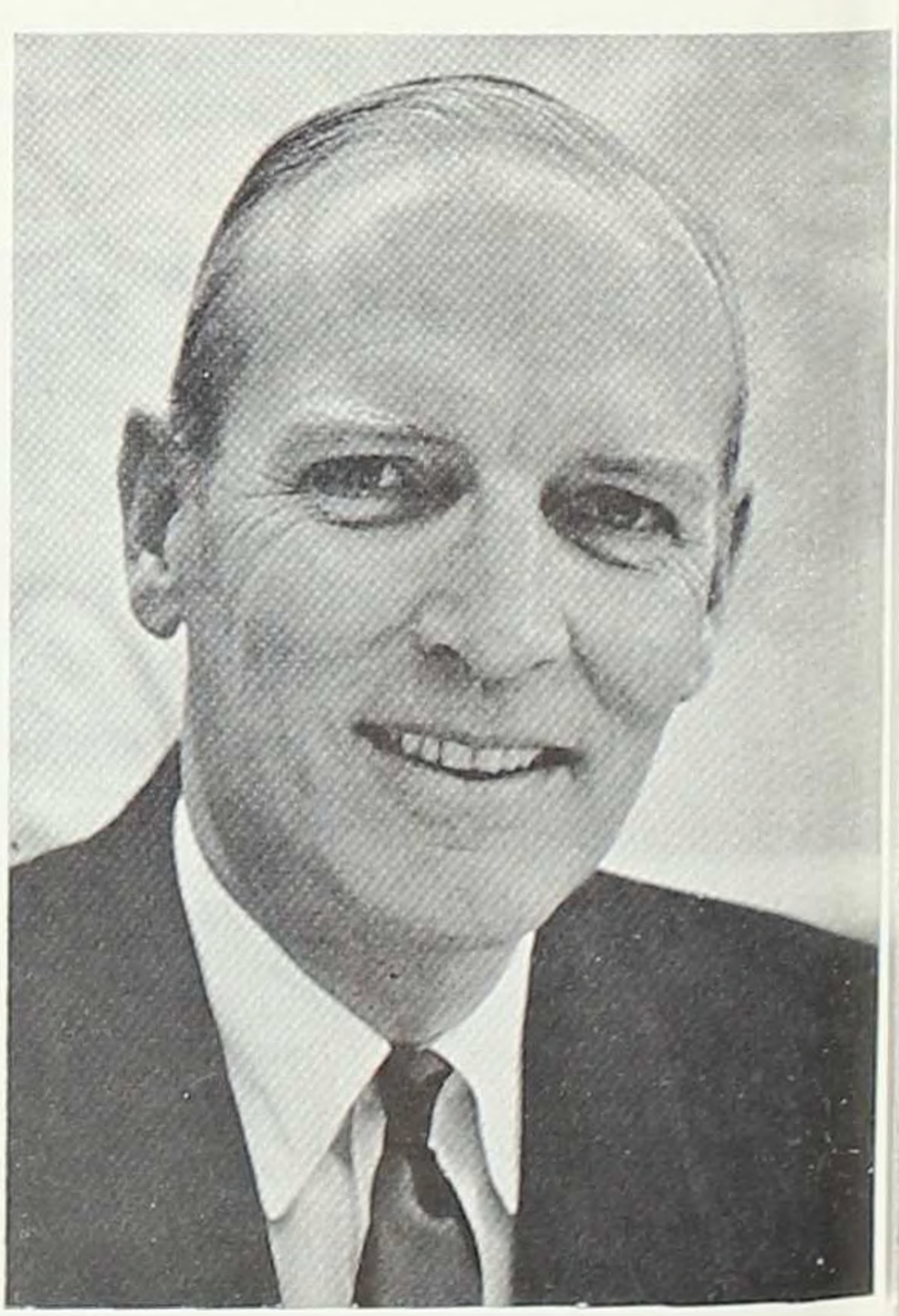
F. C. HILLS

T. P. GERL

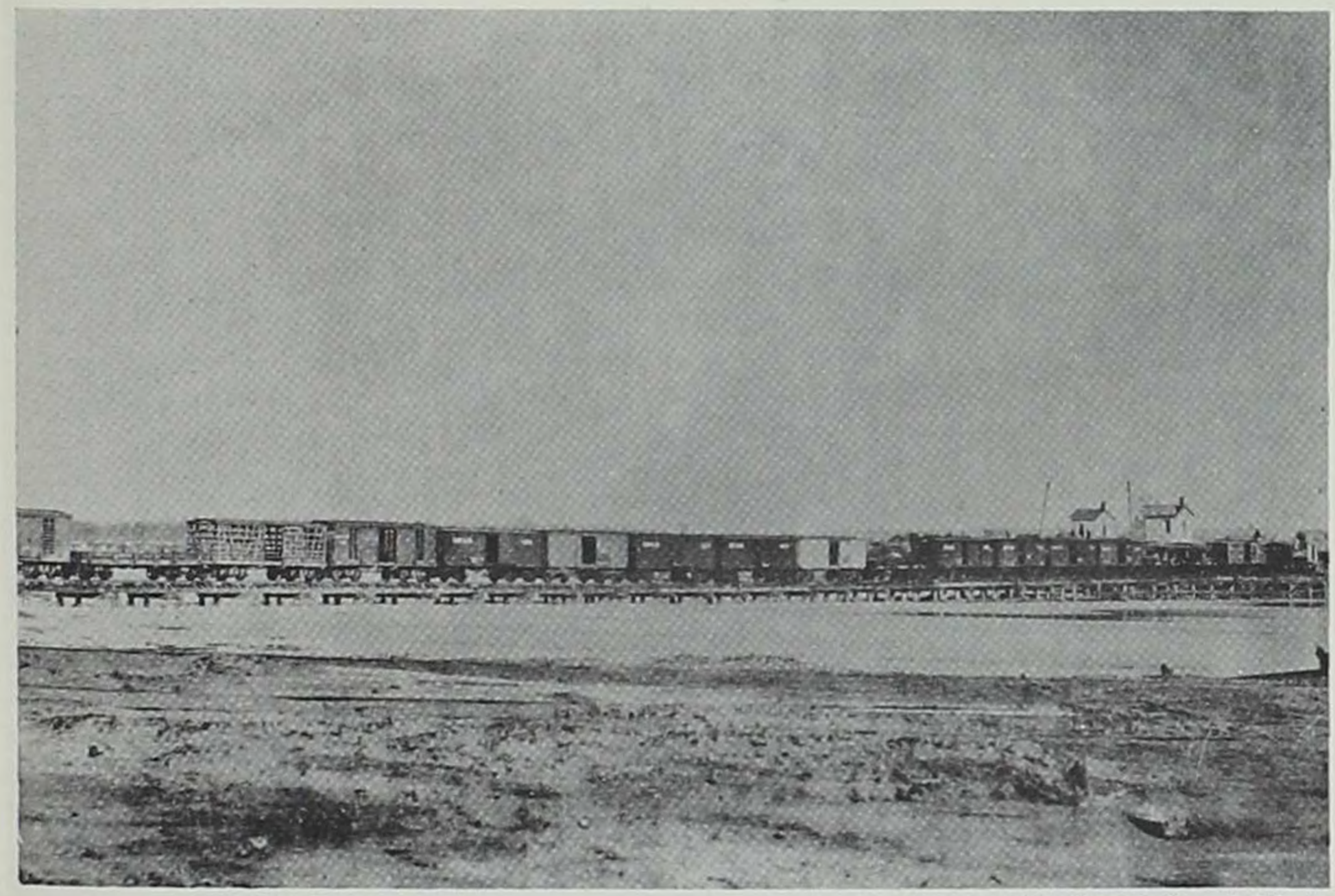


Great Northern Photos

RALPH BUDD, an Iowan, headed the Great Northern from 1919 to 1932. He subsequently became president of the Burlington, a post he held until 1949.

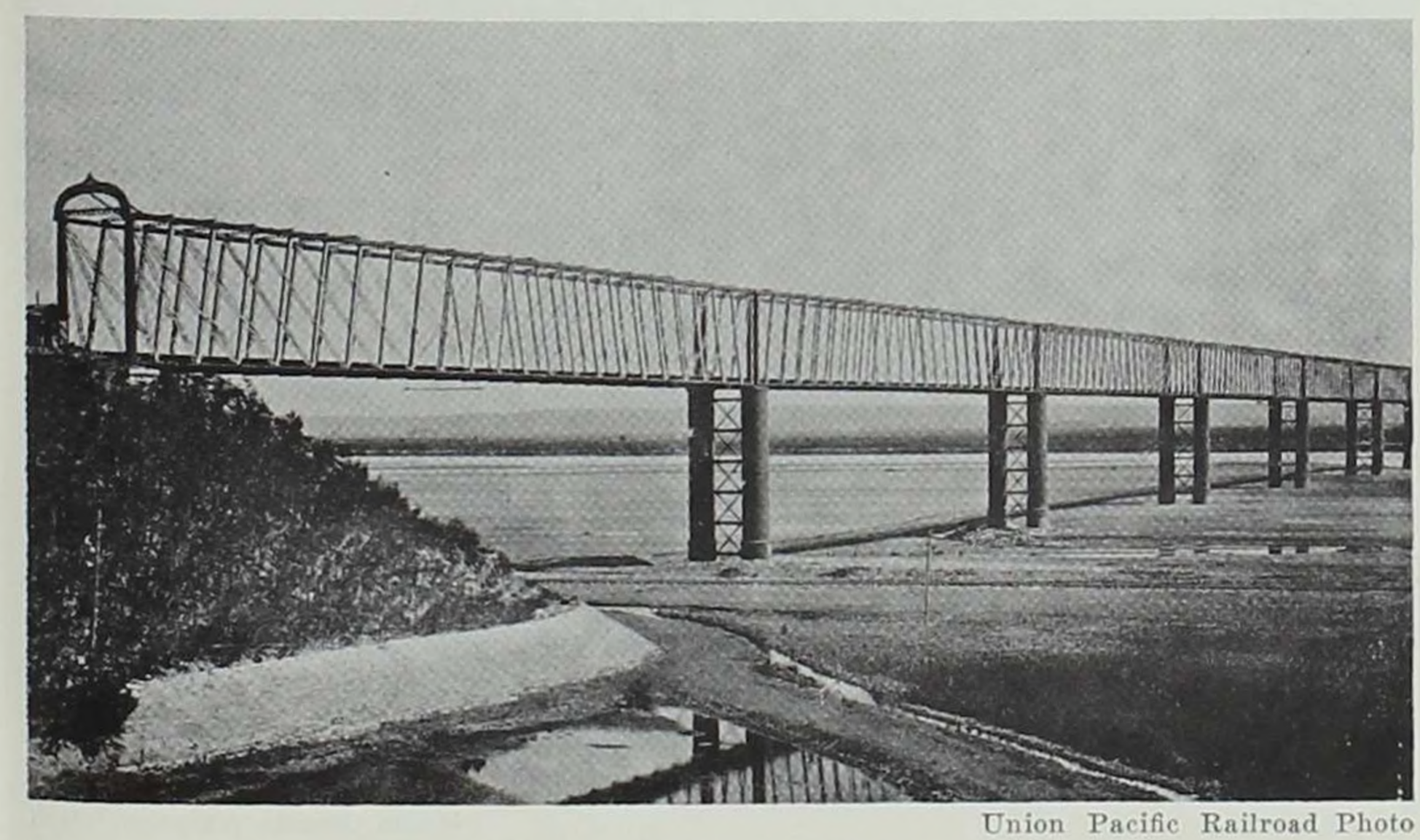


JOHN M. BUDD, current president of the Great Northern, like his father Ralph Budd, was born in Iowa. Early in his career he served as trainmaster in Sioux City.



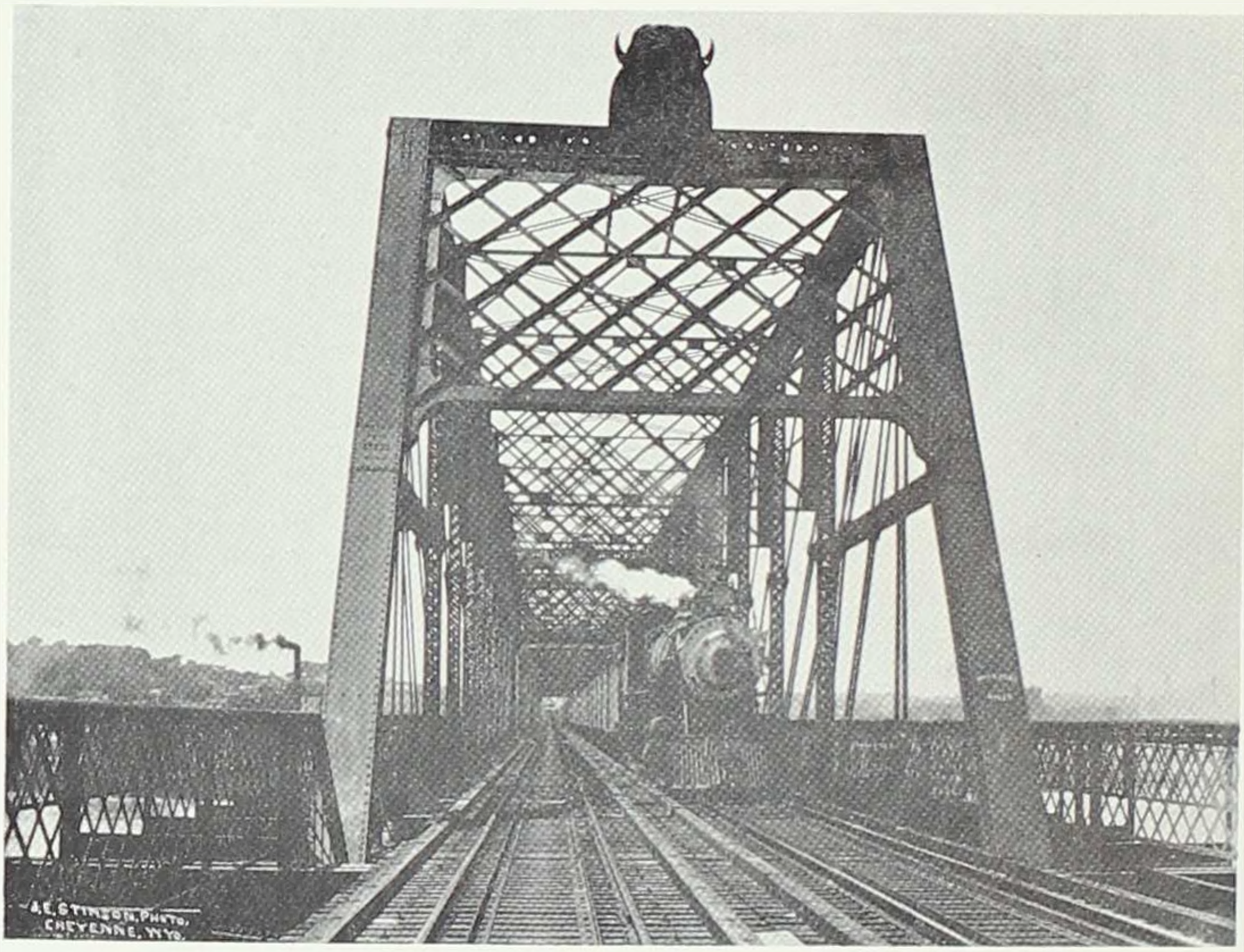
Union Pacific Railroad Photo

Temporary wooden trestle carried Union Pacific trains across the Missouri River when navigation was closed during the winter months. Car ferries were used the remainder of the year.



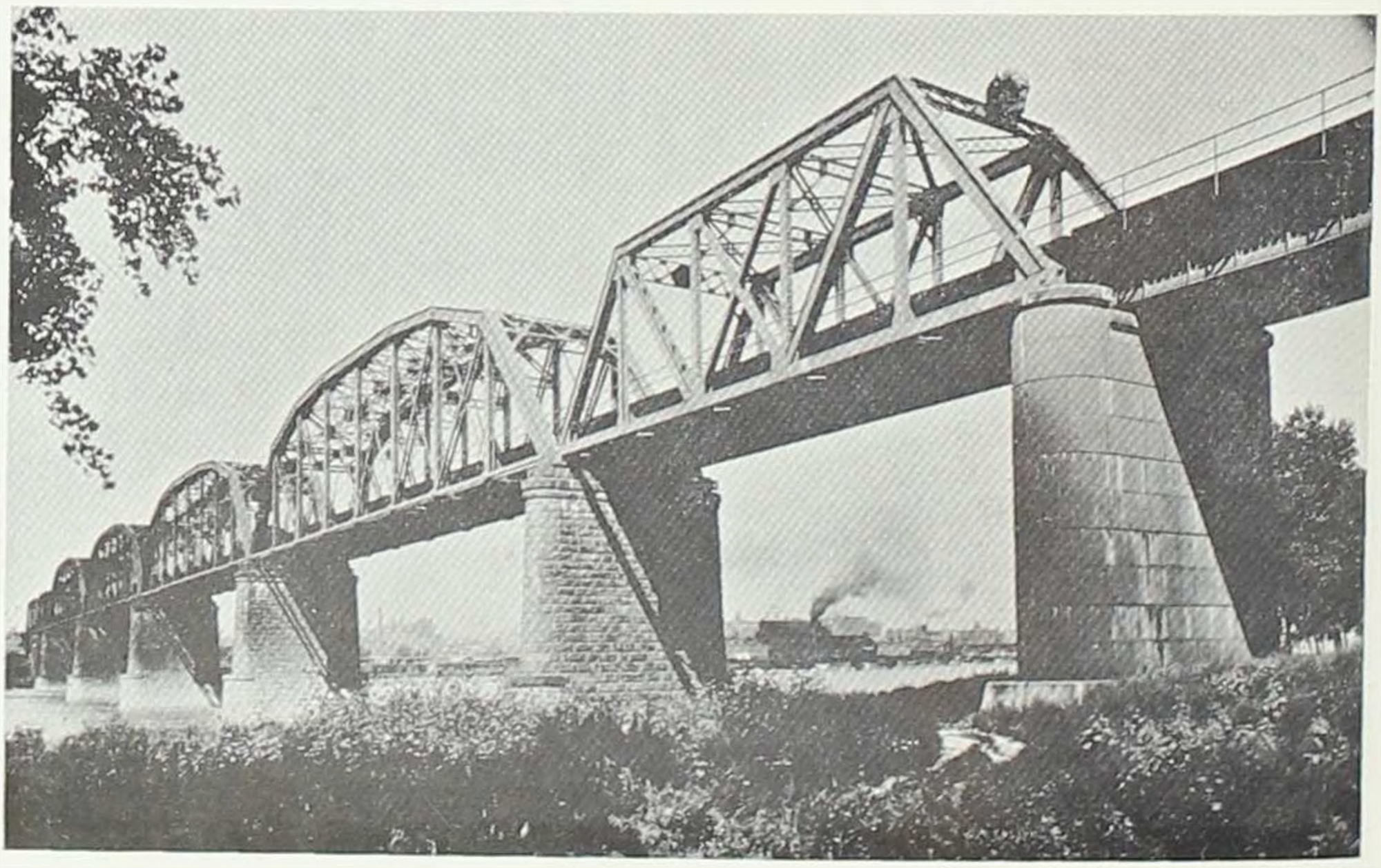
Union Pacific Railroad Photo

First bridge linking Council Bluffs with Omaha. The single track structure was completed in 1872 and remained in service for fifteen years.



Union Pacific Railroad Photo

Overland Limited coming into Iowa over double track bridge completed in 1887. Note large bronze buffalo head symbolizing the West high above the tracks. Girders on both sides of the structure formerly carried highway vehicles.



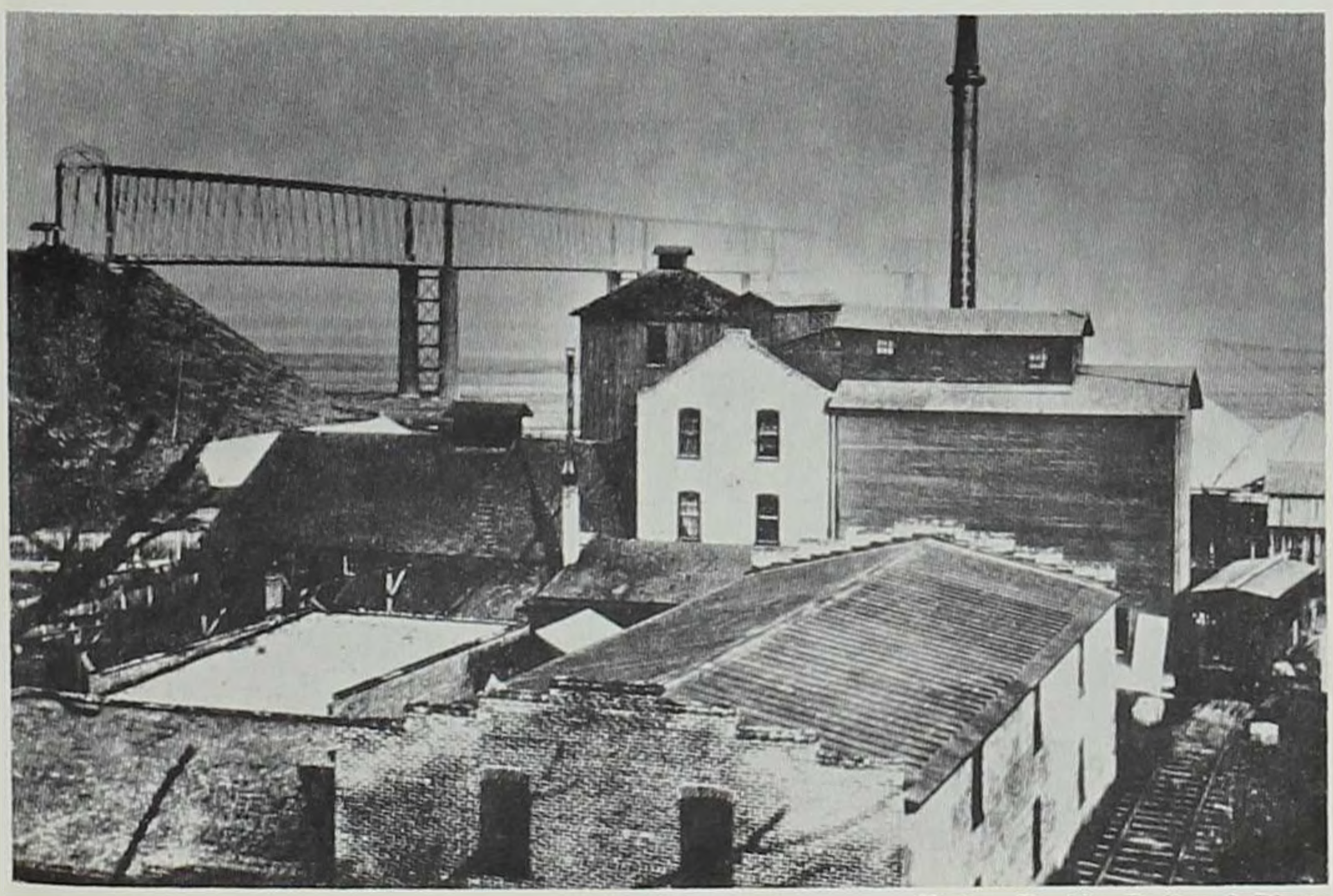
Union Pacific Railroad Photo

View of double track bridge in 1927 ten years after it was rebuilt for heavier traffic. Photo taken from the Iowa bank of the Missouri River.

UNION PACIFIC

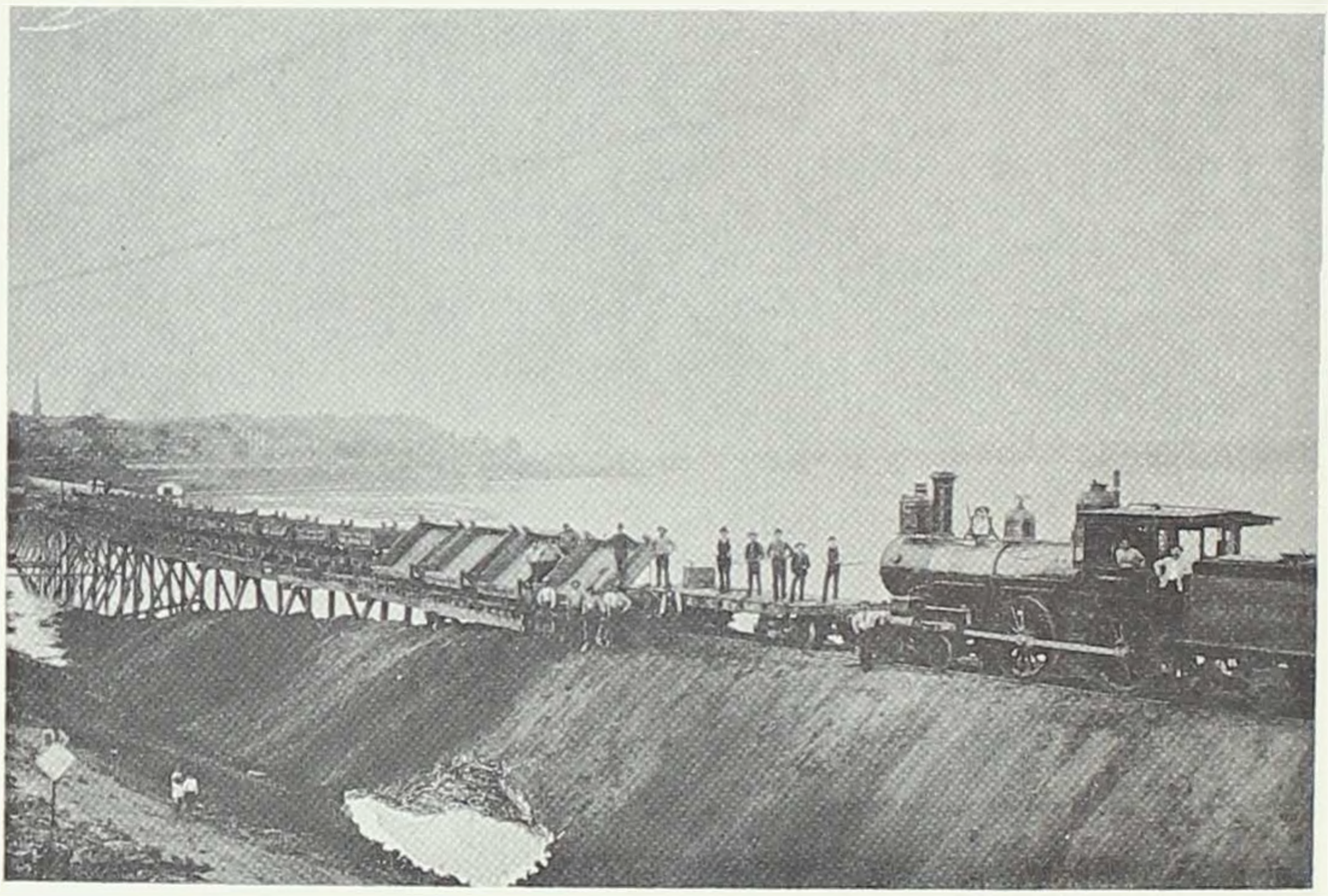
Union Pacific Railroad Photo

Union Pacific Transfer Depot: In early days this was the "Gateway to the West" as all passengers from the East had to leave the Eastern road trains and pass through this station to board the Union Pacific trains on which they went into the West.



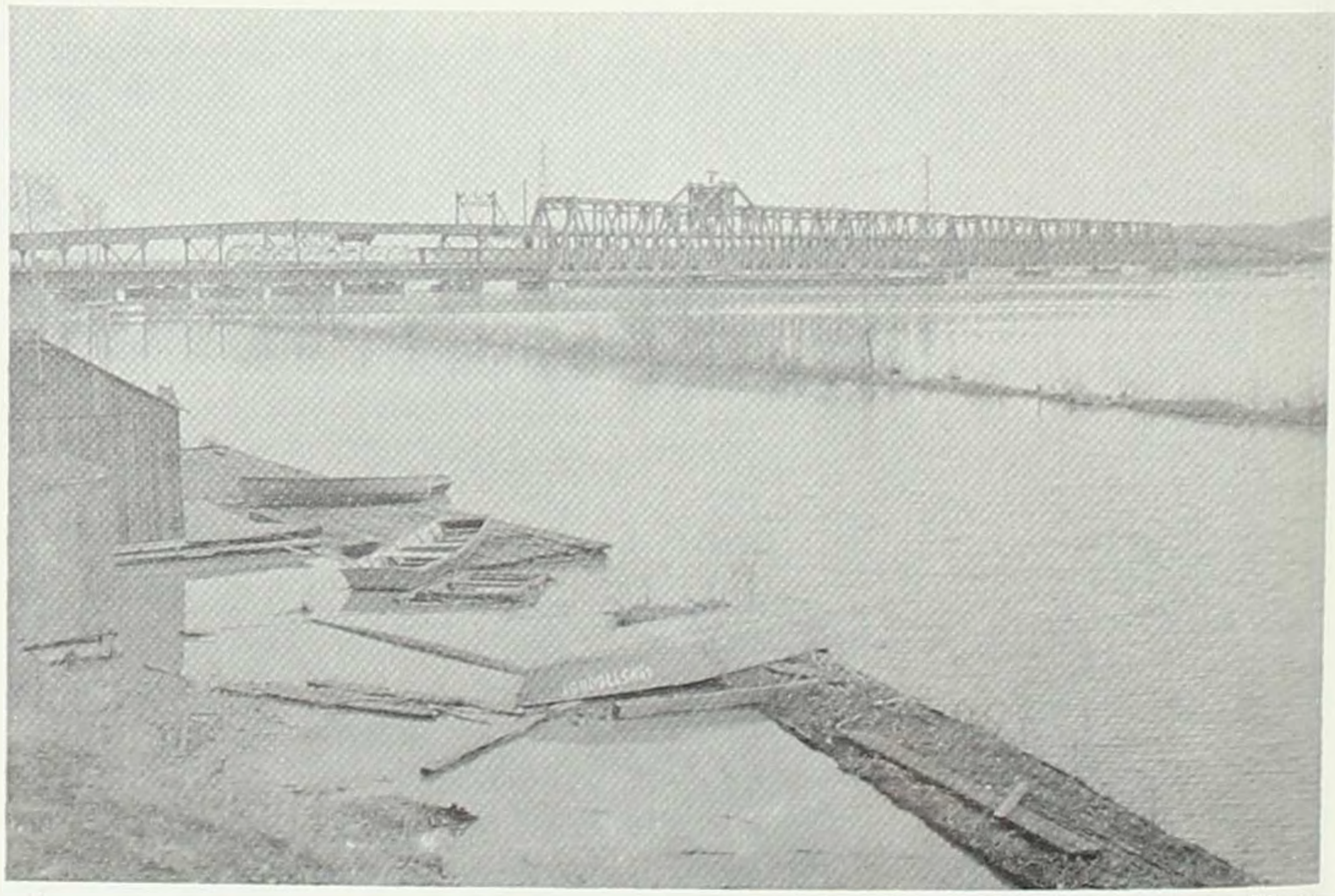
Union Pacific Railroad Photo

First Union Pacific bridge across the Missouri River at Omaha. Looking north from the Omaha side.



Santa Fe Railway Photo

Constructing the Santa Fe's first rail and highway bridge across the Mississippi River at Fort Madison in 1887. The light American-type locomotive was a typical "all service" engine regularly used in both freight and passenger operation before the turn of the century.



Santa Fe Railway Photo

Present double-track railroad bridge, with its highway component above the tracks, was opened in 1927. At time of construction its 525-foot draw-span was said to be the longest in the world.

The Union Pacific in Iowa

A tall, gangling visitor was introduced to Grenville M. Dodge at the Pacific House in Council Bluffs in the summer of 1859. Dodge, who resided in that growing river town, had surveyed the route of a projected railroad across Iowa and on into the Platte Valley. The caller showed great interest in the young surveyor's knowledge of the country and his enthusiasm for a transcontinental line passing through Council Bluffs. When the two had finished talking, Dodge declared, in an expression of the period, "He shelled my woods."

The visitor had very adroitly drawn out nearly all Dodge knew about a route to the Pacific. Nine months afterward, the inquisitive visitor was nominated president of the United States. His name was Abraham Lincoln. Lincoln never forgot his meeting with Dodge on the veranda of the Pacific House. In later years, before President Lincoln specifically named Council Bluffs as the eastern terminus of the "Pacific Railroad," he again conferred with Dodge. It is very likely that Dodge's counsel and knowledge greatly influenced Lincoln's decision. Indeed, Dodge had the measure of zeal necessary to promote the Union Pacific that Theodore Judah had for the Central Pacific.

On July 1, 1862, President Lincoln signed the Pacific Railroad Act under which the Union Pacific was chartered. Unfortunately, it did not clearly spell out the eastern terminus of the line other than it was to be built westward from the Missouri River. Aware of this shortcoming, Lincoln called in Dodge, who was now a brigadier general in the Federal Army, to discuss the matter. Later an executive order of November 17, 1863, was issued establishing the terminus at "the western boundary of the State of Iowa, east of and opposite to the east line of section 10, in township 15 north, of range 13, east of the sixth principal meridian, in the Territory of Nebraska." A subsequent order in 1864 spelled this out clearly.

Ground was first broken for the Union Pacific on the west side of the Missouri River near Omaha on December 2, 1863. Since Council Bluffs was without a railroad connection from the East until the arrival of the North Western on January 22, 1867, construction material came up the river from St. Joseph by boat. The first locomotives came by rail to St. Joseph, thence upstream to Omaha. As railroads built westward across Iowa some supplies were carted from the advancing railheads to Council Bluffs and ferried across the river to Omaha.

During this early period, the Union Pacific had a fleet of steamboats known as the "Railroad Packet Line." Among them were the *Metamora,*

Colorado, and *Denver,* plus scows and ferries operating between Council Bluffs and Omaha. The expedient of constructing a temporary trestle across the Missouri was resorted to during the winter of 1867-1868. But as soon as navigation opened up in the spring the bridge was dismantled.

Iowa's role in the Union Pacific would not be complete without further reference to Grenville M. Dodge, Council Bluffs's most distinguished resident. After a valiant Civil War career, General Dodge was appointed chief engineer in 1866. He succeeded his friend, former employer, and fellow Iowan Peter A. Dey, who resigned because of differences in policies. During Dodge's leadership, the Union Pacific was pushed to completion. In one year under his command 568 miles of line were located, built, and made ready for operation.

Following the junction of the Union Pacific and Central Pacific at Promontory Point, Utah, on May 10, 1869, Dodge left the Union Pacific and subsequently became chief engineer of the Texas & Pacific. Later he was associated with the Gould roads in the Southwest and assisted in the building and consolidation of nearly 9,000 miles of railroad. All told, he is said to have surveyed 60,000 miles of right-of-way and is regarded as one of the Nation's greatest railroad builders.

Dodge remained loyal to the Union Pacific the rest of his life. As a director during many of the years between 1870 and 1897, he continued to

take an active interest in the road. Born on a farm in Massachusetts in 1831, the renowned railroad builder, civil engineer, army officer, and statesman made his home in Council Bluffs during the mid-1850's. From that time until his death in 1916, the eastern terminus of the Union Pacific was "home." It is fitting that his three-story brick home with a mansard roof and large French windows is preserved as a local shrine. In 1964 the site received greater recognition when it was made a Registered National Historic Landmark, the second to be so favored in Iowa.

Coming back to the early development of the Union Pacific, it was not until 1872 or two years after Dodge resigned as chief engineer, that the first permanent railroad bridge spanned the Missouri River. The original single track structure was begun in 1869 under the direction of Theopilus E. Sickels. It was 2,750 feet long and consisted of 11 spans of 250 feet each. The approach on the east was by solid embankment and on the west by a cottonwood trestle, which was shortly replaced by a fill. The substructure consisted of 11 iron piers and one stone pier. Each pier was made of two cylinders braced together by cast iron struts and diagonal ties. When a storm blew down the two easterly spans in 1877 they were replaced by a timber trestle.

As tonnage increased and as newer lines built across Iowa to funnel more freight and passengers

to the Union Pacific, the bridge soon became inadequate and congested. A double track structure was the only solution to the problem. Work began on reconstructing the pioneer span in the summer of 1885 and it was opened as a two-track thoroughfare on October 1, 1887. The rebuilt bridge had five piers founded on pneumatic caissons. They were of limestone and granite. The roadbed rested on four through spans, and three deck-truss spans at each end. The location remained the same.

A novel addition on each side of the structure was cantilever arms which supported roadways for highway vehicles. A toll was charged for wagons and carriages crossing the bridge.

Perhaps the most interesting features to passengers on transcontinental trains were the symbolic figures at each end of the superstructure. At the east end, a colossal bronze buffalo head representing the wilderness of the Great Plains was placed high above the tracks. On the west, there was a lofty bronze bas-relief, showing a plow, anchor, and steam hammer, which stood for the agriculture, commerce, and manufacturing of the East.

The third and final rebuilding of the strategic bridge took place in 1916. It was found that the superstructure of the 1887 bridge was not strong enough for the demands of heavier trains, although the substructure remained in almost perfect condition. The piers were accordingly left intact, but

all the spans were removed. In the center part of the bridge, four new pin-connected Pratt truss spans were placed on the five sturdy masonry piers. On the east approach, an assortment of spans, including three deck-girders, one tower and one riveted Pratt truss, characterized the rebuilt structure. The west approach was rebuilt with one deck-girder, a tower, and two Pratt truss spans.

By an ingenious system of shifting the old spans northward and easing the new structure into its place on permanent piers, traffic was held up for only 10 hours. Indeed, the actual movement of the individual spans required hardly longer than 15 minutes. The bridge was closed shortly after 11 a.m. on December 23, and by 9:40 p.m. the first trains whistled over the rebuilt structure.

The spanning of the Missouri River by the Union Pacific has been emphasized because it was the first railroad to bridge that waterway in Iowa. With the exception of the Illinois Central, which crossed the Missouri in 1894, there is to this day no other railroad bridging the "Big Muddy" between Council Bluffs and Omaha.

Until the pioneer bridge was built, passengers were obliged to ride a shuttle train from connecting lines to the river bank, where they alighted to go by ferry to Omaha. This double transfer was necessary because the three railroads which entered Council Bluffs from the East terminated several blocks from the bank of the Missouri.

After the Union Pacific spanned the river, it ran "dummy trains" from Council Bluffs directly to Omaha. For a time these "bridge trains" consisted of flat cars covered with awnings. The railroad also bought a controlling interest in horse car lines serving the two cities and had them connect with the "dummies." By 1887 the Union Pacific had hourly "bridge service" from Ninth and Broadway in Council Bluffs to South Omaha, with several stops in Omaha.

The problem of a permanent depot in Council Bluffs was not resolved until the road's eastern terminus was definitely established. The railroad and the City of Omaha went to court in endeavoring to make the Nebraska metropolis the terminal. But a Supreme Court ruling, in 1875, confirmed Lincoln's decision that Council Bluffs was to be the legal terminus.

Thereafter, the Union Pacific outdid itself in making its eastern gateway a terminal befitting the stature and importance of the Nation's first transcontinental route. It erected a commodious two-story brick building with walls 24 inches thick. An unusual feature was a truncated cupola in the center of the structure.

Inside, passengers were awed by a 20-foot high ceiling and a spacious corridor, which had at its threshold the inscription "Where the West Begins." A grand ballroom or banquet room, two large parlors, and 36 palatial sleeping rooms fur-

nished in attractive black walnut suites helped to make it a showpiece and the pride of everyone in Council Bluffs.

In the "first class" dining room occupying the north wing, sumptuous meals were served for 75¢. Special Sunday dinners proved very popular with townfolk and travelers alike. There was also a barroom, serving mostly "mixed" drinks, and a barber shop. The usual complement of waiting rooms and baggage rooms along with a newsstand and lunch counter were provided. Five express companies were also housed in the building, which was opened in 1879.

For "foreigners" of limited means, there was the "Emigrant House" — a 50-room frame building west of the terminal. A bakery, laundry, land office, and cold storage facility were housed in the wooden structure. Although the accommodations were Spartan in contrast with the luxurious quarters in the main building, they provided low-cost housing for thousands of immigrants who poured into the West.

The new terminal fostered business expansion and home-building in the vicinity of the "transfer." The giant station, however, soon began to lose much of its importance as connecting lines acquired running rights to Omaha over the Union Pacific's bridge.

Trackage-wise the Union Pacific hardly enters Iowa at all. The original single track main line ran

from what is now Union Avenue and South 12th Street, Council Bluffs, to the western border of the state, a distance of about three miles. The current double track "high iron" extends from the eastern end of the Missouri River bridge to Union Station Transfer — a distance of 2.08 miles. But it is only by taking cognizance of *track-miles* that the role of the company is apparent. Industry spurs and yard tracks tally an additional 82.14 miles.

The bulk of the trackage is in the Union Pacific's yard, where freight trains arrive from and depart for the West Coast and intermediate points. Thus, Council Bluffs is still a busy and vital terminal at the eastern end of the giant system. The terminal area embraces about 725 acres. Included in the facilities are the yardmaster's and master mechanic's offices, diesel house where locomotive running repairs are made, and a coach yard.

As a passenger terminal, however, Council Bluffs has largely been superseded by Omaha. None of the Union Pacific's crack "Cities" streamliners stop on the east bank of the Missouri River, and only a few passenger trains of other roads use this once-busy station. The historic structure was partly torn down in 1938 to make way for a mail terminal built that year. Only the north wing of the old building remains, and this has been revamped for today's modest traffic. In 1951 the mail terminal was remodeled and a conveyor system installed to expedite operation. From 50 to 55

cars of mail are worked here daily for western points and about 15 for eastern destinations. It is said that at one time Council Bluffs was the third largest terminal railway post office in America based on the volume of mail handled.

Currently all railroads entering Council Bluffs, with the exception of the Illinois Central, use the Union Pacific for freight or passenger service, or both, in reaching Omaha. Day and night luxurious streamliners, local passenger trains, long freights, and incessant switching movements keep the bridge a-throb with activity. True, the Union Pacific's main line extends only a couple of miles into Iowa, but it is the Nation's busiest and most strategic railroad gateway to half a continent.

The Santa Fe in Iowa

The reason for the Santa Fe's coming to Iowa is explained in the road's annual report of 1886. It stated in part: ". . . your Directors unanimously came to the conclusion that the interests of this Company required that it should have under its control an independent line to Chicago." Had the Missouri River remained the western terminus of its connecting lines to the Windy City, the Santa Fe would not have considered building into Chicago at that time. But the Burlington and the Rock Island had extended into Santa Fe territory west of the Missouri; and the Gould lines had their own rails from Lake Michigan to the Southwest.

While the Santa Fe boasted of a 6,500-mile system of owned or controlled lines extending from Kansas City to Los Angeles and San Diego, it was never sure of its eastern connections. All too often its Chicago links would expand beyond the Missouri, and overnight a new competitor would be born. Such a situation jeopardized the continued growth and stability of the far-flung railroad.

To gain entry into Chicago the Atchison, Topeka & Santa Fe had three alternatives: it could buy the Chicago & Alton; build its own direct line; or purchase the ailing Chicago & St. Louis, use

about a hundred miles of that Illinois railroad, and construct its own line the remainder of the way. The latter plan was adopted as the most feasible.

It is said that in planning the eastern extension Chief Engineer Albert A. Robinson took a ruler and drew a straight line between Kansas City and Chicago. Such an airline would cut across the southeastern corner of Iowa. While the road actually constructed is not entirely ruler-straight, there are few curves and none of a degree to impede fast running.

At first the Santa Fe considered crossing the Mississippi River at Keokuk; and, with great secrecy, a crew of surveyors made their headquarters in that town. Later, when Fort Madison learned of the surveys, its citizens agreed to furnish some 80 acres of land for railroad purposes. They also proposed to pay one-fourth of the right-of-way costs through Lee County. Because of these inducements and other factors, the Santa Fe agreed to go through Fort Madison rather than Keokuk in making the Mississippi River crossing. Subsequent events show that Fort Madison profited a great deal from the transaction because of increased property values due to the coming of the Santa Fe.

To build the new line, a company called the Chicago, Santa Fe & California Railway was incorporated in Illinois on December 3, 1886. A separate Iowa charter was obtained for construc-

tion in Iowa and Missouri. Early in 1887 construction was begun, and by the end of the year the entire line was completed from Chicago to Kansas City except for a bridge across the Missouri River. Also, because of settling track, through service was not begun until the following year. The new extension was about 40 miles shorter than any other route linking Chicago and Kansas City. It was single track laid with steel rails, ranging from 67 to 71 pounds, on good ballast. Designed for high-speed operation, it soon saw crack transcontinental trains highballing from Chicago to the West Coast.

One of the most expensive parts of the new road proved to be the bridge across the Mississippi River. The Mississippi River Railroad & Toll Bridge Company was chartered October 23, 1886. This firm was empowered to cross the waterway at Fort Madison. The bridge consisted of seven truss spans and an east approach of about 350 yards. A draw span 400 feet long permitted boats to pass through the structure. As its corporate name suggested, highway traffic was accommodated by a roadway on either side of the truss spans. The bridge, which was started in March 1887, was ready for traffic on December 7 of that year. The bridge company was soon absorbed by the Santa Fe, as was the Chicago, Santa Fe & California, although the latter was not officially merged until 1900.

The old wrought iron structure was superseded by a $5 million double track bridge in 1927. Like its predecessor, it has a highway component. The bridge has deck girders at either end with four large through truss spans in the central portion. About half way up between the tracks and the top of the truss was the highway. On the Illinois side motor vehicles descended to the south of the right-of-way and on the Iowa side to the north. At the time the bridge was built, its 525-foot draw span, near the Iowa shore, was said to be the longest in the world.

Although the Santa Fe has only 19 miles of line in Iowa the state is of singular importance to the railroad because it has been headquarters of the Illinois Division since 1956. Company records also indicate that division headquarters were likewise located there from 1901 to 1903. The first division superintendent was Frank T. Dolan, whose jurisdiction was then known as the Chicago Division. He later became general superintendent, Southwestern District, of the Chicago, Rock Island & Pacific Railway.

Today, as in the past, all passenger trains make two stops in Iowa. One is at Fort Madison, and the other is at Shopton, 1.7 miles westward. The latter stop is so named because it was the locale for extensive shop facilities. Train crews change here, and freight engines are refueled.

Shop construction started in 1888 along with

the erection of a hospital for railroad employees. A planing mill and bridge and building maintenance facilities were the chief features of the shops. Later a blacksmith shop was included and the roundhouse quarters greatly enlarged for bigger steam locomotives. In 1917 a new power plant was built. The same year saw the completion of a two-story brick structure providing dormitory facilities and a well-stocked reading room for employees. Heretofore, crude bunkhouses and cheap hotels often characterized lodging quarters available at division points.

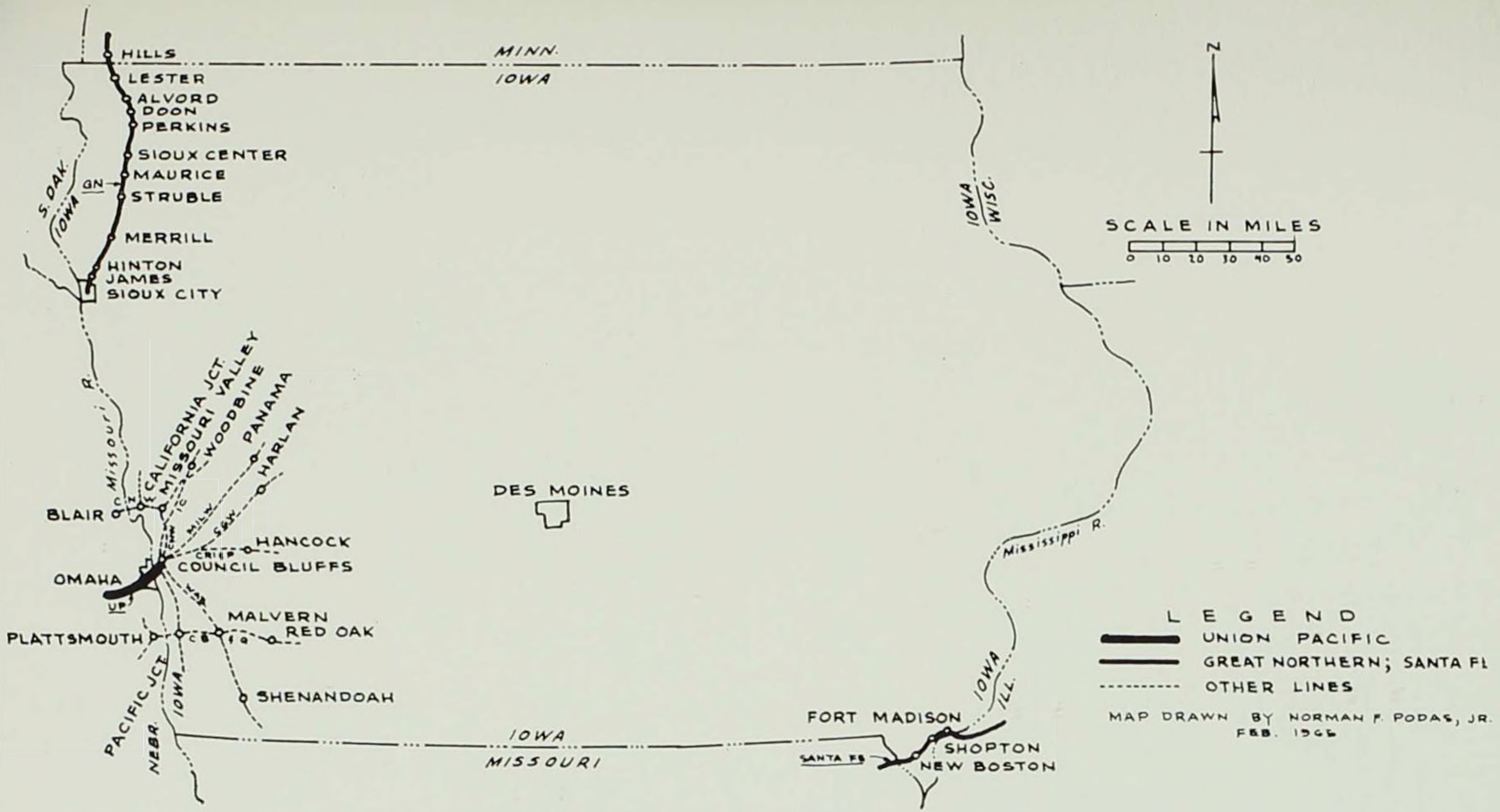
Throughout the years, this railroader's "home away from home" has been modernized with radio and television to supplement books and periodicals. Pool tables, pianos, showers, and a lunch counter make Shopton a pleasant place for trainmen on their layovers in Iowa.

Modern railroading, especially the use of Diesel power, has tended to consolidate shop facilities and to do away with many points formerly needed for car and engine repair. For this reason the Fort Madison shops were closed in 1951. Similarly, the Santa Fe Hospital was discontinued and the building, together with five acres of land, given to Fort Madison to be administered by a trust fund.

Shopton, nevertheless, continues to have a busy yard, whose tracks total 39 miles. Passenger train icing facilities, stock pens, and a "piggy-back" ramp for trailer-on-flat-car equipment are some of

the adjuncts in yard operation. Then, too, Fort Madison's industries, including a multi-million dollar fertilizer plant, provide considerable freight for many points on the Santa Fe system.

Instead of a single track railroad equipped with light rails, the Santa Fe's main line through Lee County is now double track "high iron" of 131 and 132-pound rail protected by efficient Traffic Control Signalling. Every day a dozen crack passenger trains go through the southeastern tip of Iowa as they speed to and from the Southwest or Pacific Coast points and Chicago. Notwithstanding the fact that the *Super Chief*, the *Chief*, and other famous streamliners do not stay long in the state, they all stop at the historic town of Fort Madison—a site of the old fort on the Mississippi named after the fourth president of the United States.



GREAT NORTHERN, SANTA FE AND UNION PACIFIC LINES IN IOWA

Santa Fe Freight Crossing Mississippi at Fort Madison

Three 700 Unit Diesel Freight Engines West of Omaha