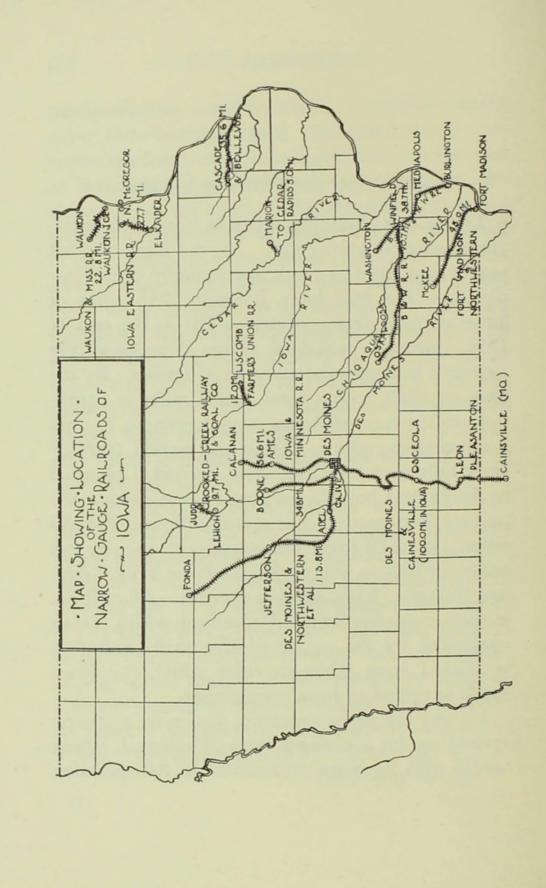
## Iowa and the Narrow Gauge

The railroad building epoch in Iowa did not begin in earnest until 1855. By the close of that year a few miles of track had actually been completed. One year later, however, 246 miles of finished road were reported, while at the end of 1858, during a period of severe depression, the railroads had been extended to 343 miles. By the close of 1860, with a total of 655 miles in operation, railroad construction was beginning to gain a momentum, which, during the period immediately following the Civil War, carried it forward by leaps and bounds, so that in one decade the mileage had reached the sizeable figure of 2683 miles. In 1870 Iowa was surpassed only by the States of Illinois, Pennsylvania, New York, Ohio, and Indiana. Missouri was seventh. All of these earliest railroads were of standard width, being controlled by the gauge of the roads radiating westward from Chicago, with which the Iowa roads expected to form connections.

During the early seventies, however, agitation sprang up for a cheaper type of railroad, which would also be more economical in its operation



and up-keep. This discussion centered attention upon narrow gauge construction, which grew rapidly in popularity until nearly a score of such lines were promoted within the State and four-teen were actually built, comprising approximately five per cent of the total construction or about 575 miles of track. Aside from a few scattered ventures of small importance, these narrow gauge roads of Iowa may be divided into two distinct geographic groups; those building westward from the region of the Mississippi, serving the immediate hinterland, and those radiating outward from Des Moines.

A number of short independent narrow gauge lines were constructed about the same time. One of the earliest of these was the Farmers Union Railroad which was incorporated in 1875 and began operating that year a wooden-rail track from a sawmill near the Iowa River west of Liscomb in Marshall County, eastward through Conrad Grove (now Conrad), to the town site of Beaman, a distance of about twelve miles. The equipment of this road consisted of a single engine, a caboose, and some freight cars. After being operated for a few months, it fell into disuse, owing to flimsy construction and lack of adequate financial support. While the road was of little economic value, it is historically significant as be-

ing the first railroad line in Iowa to be abandoned.

During the following year, in 1876, the Crooked Creek Railway and Coal Company constructed a narrow gauge railroad from Judd in Webster County, a station on the Illinois Central, south to the town of Lehigh on the Des Moines River, a distance of about eight miles. The road began operation with one engine, one combination passenger car, twenty-eight coal cars, three other cars, and "no telegraph". With only one locomotive the danger from head-end collisions was exceedingly remote. The mileage was subsequently increased to 9.7 miles and the road was standardized by November 8, 1880. This was probably one of the earliest jobs of widening the narrow gauge within the State.

Articles of incorporation were adopted in 1874 for another early narrow gauge line, the Waukon and Mississippi Railroad Company, situated in the extreme northeastern corner of the State. This road ran southeastward from Waukon a distance of 22.8 miles to a point on the Mississippi River where it connected with the Chicago, Milwaukee and St. Paul road at Waukon Junction. Begun on April 29, 1875, construction was finally completed in 1877, when on October 27th, "at 3 o'clock P. M., the engine 'Union Prairie' rolled up to the platform of the Waukon depot for the

first time." In May, 1880, this line passed into the hands of the Milwaukee railroad and soon thereafter was changed to standard gauge.

At almost the same time, in November, 1875, the Iowa Eastern Railroad Company completed and opened 19.1 miles of narrow gauge track to provide Elkader, situated at an isolated spot on Turkey River, with railroad facilities. From Elkader this road extended northeastward through a rugged country, touching the towns of Stulta, St. Olaf, Farmersburg, Froelick, and Beulah. It formed a junction at Beulah with the standard gauge trunk line of the Milwaukee building westward from North McGregor (Marquette) entirely across the State.

The motive power of this road consisted of two locomotives, one named the "Pathfinder" and the other "Diamond Joe". These were equipped with six drive wheels, said to be the first such engines west of the Mississippi. All side rods and bars were of polished steel, while shiny brass bands ornamented the boiler, smoke-stack, sand box, and steam dome. The other rolling stock consisted of two coaches, two baggage cars, and about thirty box cars and twenty-five flat cars.

After the Iowa Eastern Railroad was completed many bad washouts occurred on the Elkader end of the track so that the trains could run only to Stulta, two miles northeast of the terminal. Moreover, the iron-plated wooden rails employed on about four miles at the Elkader end of the line proved impracticable, particularly in very cold weather when the iron strips curled up and derailed the coaches.

The property of the narrow gauge line was steadily improved, however, the wooden rails were replaced with iron rails, and in the autumn of 1881 the road was acquired by the Milwaukee system. The work of widening to standard gauge was completed in the spring of 1882.

In the year 1879 the Cedar Rapids and Marion City Railroad Company built a narrow gauge steam motor line from Marion to the city limits of Cedar Rapids, a distance of five miles, connecting with the horse car service in the business portion of Cedar Rapids. Two years later "the property, rights and franchises" of the Marion line were purchased by the Street Railway Company of Cedar Rapids, which rebuilt, extended, and electrified the entire system.

The Fort Madison and Northwestern Narrow Gauge Railway Company was organized on July 17, 1871, for the purpose of constructing a line westward from Fort Madison, through West Point, Birmingham, and on to Council Bluffs by the way of Oskaloosa. Surveys and grades were

made and ties and rails were laid to West Point, where the first engine arrived about June 1, 1879. On October 16th of the same year the road was reorganized under the name of the Fort Madison and Northwestern Railway Company, which secured the original twelve miles of narrow gauge previously built for the sum of "forty thousand dollars for the whole concern, including road-bed, right of way, iron, locomotives, cars, buildings, etc., with all other appendages thereto."

By 1883 this line had been extended to Birmingham, a distance of 41 miles, and two years later to McKee (afterward called Collett Station), 45 miles from Fort Madison. In 1890 the road was sold to the Chicago, Fort Madison and Des Moines Railway Company, which corporation widened the line and extended it to Ottumwa, a total distance of 71 miles. For a short time the road was leased and operated as a feeder by the Santa Fe, connecting with the main line at Fort Madison. It was subsequently purchased by the Burlington system and now constitutes the Ottumwa-Fort Madison branch.

On New Year's Day, 1880, a narrow gauge line was completed, 35.6 miles in length, running over a picturesque part of Iowa from Bellevue on the Mississippi to Cascade, an inland town in Dubuque County. This road was begun on Sep-

tember 19, 1873, by the Chicago, Bellevue and Western Railroad Company. Within a year and a half of its completion, however, it was acquired by the Milwaukee interests. Now it has the unique distinction of being the sole surviving nar-

row gauge line in the State of Iowa.

Radiating from Des Moines, a number of narrow gauge roads were built, all of considerable importance. Rivalry sprang up between the towns of Nevada and Ames in Story County, both located on the main line of the North Western, to become the junction for a connecting road to Des Moines. The Iowa & Minnesota Railroad Company was organized in 1866 with the avowed intention of building such a line and its promoters very cleverly played each community against the other to secure as much financial support as possible. This sort of subterfuge was commonly employed by early railroad builders, and in this instance the company finally decided in favor of Ames. Not until July 26, 1874, however, was the road actually completed. This narrow gauge was subsequently extended beyond Ames and, by April 1, 1878, it had reached the now forgotten spot called Calanan (near Jewell), 56.63 miles northward from Des Moines, and was projected, though never completed, to Humboldt, a total distance of 105 miles. After being operated four or

five years as a narrow gauge road, it was purchased by the North Western and promptly widened to standard gauge as far as Ames in 1883. The portion above Ames to Calanan was widened later.

The longest single narrow gauge railroad ever operated in the State ran from Des Moines northwest through Adel and Jefferson to Fonda, a distance of 113.8 miles, and in addition this road operated a branch 34.8 miles in length from Clive, seven miles west of Des Moines, to Boone. This line was built piecemeal by several corporations. The first stretch of seven miles was laid in 1878 by the Des Moines. Adel and Western between Waukee and Adel. This road was absorbed by the St. Louis, Des Moines and Northern, organized on April 4, 1881, which completed the line from Waukee into Des Moines by December, 1881. In the meantime, a company known as the Wabash, St. Louis & Pacific Railroad extended the line northward from Adel, reaching Jefferson in 1880, and eventually Fonda, 46 miles beyond. The road between Clive and Boone was completed on August 8, 1882. Meanwhile, on January 23, 1882, that portion of the road between Clive and Waukee and the undivided half interest of the road between Clive and Des Moines was conveyed to the Des Moines and Northwestern, a company afterward controlled by F. M. Hubbell of Des Moines and Grenville M. Dodge of Council Bluffs. By 1888 these men had likewise acquired control of the entire property from Des Moines to Fonda, which they operated under the name of the Des Moines and Northern until about 1898 when it was acquired by the Milwaukee system. Previously, however, the road had been widened to standard gauge.

Another important narrow gauge road running out of Des Moines was the Des Moines. Osceola and Southern, organized at Osceola in 1880 for the purpose of constructing a line from that city to the State capital. Much of the stock was subscribed locally and, with the further aid of some eastern capital, construction was started early in the spring of 1881, the road being completed to Des Moines during the summer of the following year. The "southern" part of the road, which ran from Osceola through Leon into Missouri, was completed in 1884. The only interstate narrow gauge railroad operating in Iowa had 111 miles of track, of which 11 miles was between Pleasanton, Iowa, and Cainsville, Missouri. The road was built at a total cost exceeding one million dollars.

Inasmuch as the road was built on a mileage contract, many queer alignments of track were made in order to increase the profits of the contractors. In making the circuit from St. Marys around to New Virginia a horseshoe curve was executed which was unique in Iowa railroad construction. Within the first two miles south of Osceola there were ten trestles, and when the road was broadened this construction was reduced to one mile with only one large fill and one bridge. In 1885 the road passed into a receivership, and was acquired by a new company known as the Des Moines and Kansas City Railroad Company. This corporation was later absorbed by the Burlington and the track broadened.

One of the most successful narrow gauge systems built in the State was a combination of two roads in southeastern Iowa, comprising the tracks of the Burlington and Northwestern (B. & N. W.), operating between Washington and Burlington, via Winfield and Mediapolis, a distance of 38.77 miles, and the Burlington and Western (B. & W.), a line 70.7 miles in length extending westward through Henry, Washington, Jefferson, Keokuk, and Mahaska counties, from Winfield to Oskaloosa. Schedules were so arranged that at Winfield the B. & W. trains made close connections with the Washington trains for Burlington, and at times joint operation of trains was practiced, making in reality a unified system of opera-

tion, though each road all the while maintained its own corporate entity. Below Mediapolis these lines ran into Burlington over the tracks of the Burlington, Cedar Rapids and Northern, a distance of 13.73 miles. Since the latter road was of standard width, a third rail had to be laid between

the broad gauge track.

The B. & N. W. was incorporated on March 3, 1875, and the B. & W. on June 7, 1881. Both roads were completed by 1884, though not without a bitter struggle with the Central Iowa Railway which built a branch from Oskaloosa to the Mississippi at Keithsburg in 1883. The Burlington and Western line was surveyed so that it crossed and recrossed the proposed right of way of the Central Iowa between Winfield and Oskaloosa. It is said that many serious encounters occurred during the construction of these parallel roads when one, under cover of darkness or by other strategic means, attempted to tear out the track of its rival and install its own rails instead.

The period following the completion of these lines proved to be one of unusual prosperity for railroads, and it appears that there was sufficient business for both companies. For short hauls on its own line the narrow gauge could operate more economically than the heavier road, but as time elapsed more and more through business devel-

oped, especially in the shipment of grain and cattle to the eastern market. This necessitated unloading and rehandling freight at the Burlington terminal, and this additional expense proved a serious handicap for the narrow gauge. several years this difficulty was partially overcome by installing narrow gauge trucks under standard gauge cars and operating mixed trains of both types of cars. The change was quickly made by hoisting the cars with hydraulic jacks so that wide or narrow trucks might be substituted. These "hit and miss trains" presented an odd appearance, especially when equipped with engines smaller than the standard size freight cars they were hauling. Occasionally for excursions, passenger coaches were supplied with temporary narrow gauge trucks, although the speed of the trains was greatly impaired.

These lines, passing through exceptionally rich agricultural territory, eventually became important feeders for the Burlington and there were rumors of absorption and standardization. This talk, however, began many years before the actual event occurred. The "widening" was not accomplished until June 29, 1902, an occasion which attracted the attention of railroad engineers as well as the general public, for this was the last narrow gauge railroad in Iowa to be widened.

BEN HUR WILSON