## 9. Telephones

Let us move on to another very interesting topic: telephones. Once again, their development was occurring just prior to and during my childhood, and their adoption was occurring during my teen and young adult years. It was all very exciting to us. The telephone today is a ubiquitous tool of communication and information exchange. When it appeared in the nineteenth century, however, the new tool provided a radical way for individuals to talk to each other, person to person, in real time. Neither the postal system nor the telegraph could provide large-scale, everyday information as people created it, and deliver it immediately to someone else. The power of the telephone can be seen in its immediate spread across the country.

Let us look at a quick review of some highlights in the development of wired and wireless communications, using A Timeline of Telecommunications – a Bell System Tribute, and other sources specific to Iowa and Wisconsin.

- **1876** First successful use of telephone by Alexander Graham Bell.
- **1877** First telephone line in Wisconsin
- **1878** Telephone line in Lancaster, Wisconsin, 14 miles from Bloomington
- **1879** First telephone lines in Iowa
- **1880** First telephone line in Madison, Wisconsin
- **1880** 30,872 Bell telephone stations in the United States. Conversation by overhead line, 45 miles-Boston to Providence.
- **1881** Mr. Eckert who ran a telephone company in Cincinnati said he preferred the use of females to males as operators. "Their service is much superior to that of men or boys. They are much steadier, do not drink beer nor use profanity, and are always on hand."
- **1881** First telephone exchange in La Crosse, Wisconsin was installed by the Wisconsin Telephone Co., the fifth switchboard in the state after Milwaukee, Racine, Oshkosh, and Appleton.
- **1884** Conversation by overhead line (hard-drawn copper), 235 miles Boston to New York.
- **1890** 211,503 Bell telephone stations.
- **1892** Conversation by overhead line, 900 miles-New York to Chicago.
- **1893** Basic patents expire; period of intense competition begins.
- **1895** Guglielmo Marconi invented the radio.
- **1896** Marconi patents wireless telegraph.
- **1900** 676,733 Bell telephone stations owned and connected.
- **1900** July 31 New Vienna City Council grants the Standard Telephone Co the right to set poles in the street and build and maintain lines necessary for the transaction of telephone service. The line came from the road that ran past the Sabers farm.
- **1901** Marconi transmits first trans-Atlantic radio message (from Cape Cod).
- **1901** Guglielmo Marconi sends first transatlantic wireless signals, 12 December.

- **1907** States start to regulate telcos. Mississippi was among the first. (The idea of regulation goes back several centuries, when in England, innkeepers were required to post their charges to prevent gouging. *"Common carrier"* regulation refers to government approval of tariffs filed by railroads, truck lines, telcos, etc. which provide the terms and conditions whereby the public can make use of their services.)
- **1907** -**Theodore Vail** returns as President of AT&T (and Western Union). He is responsible for the concept of "end-to-end" service that guided AT&T and other telcos in providing the C.O., transmission systems, and CPE that lasted until the Carterphone and Specialized Common Carrier Decisions.
- **1910** The Mann-Elkins Act enacted, putting interstate communications under the purview of the Interstate Commerce commission (ICC).
- **1910** 5,142,692 Bell telephone stations owned and connected.
- **1910** The first commercial radios are sold by Lee de Forest's Radio Telephone Company.
- **1915 (October 21)** First transmission of speech across the Atlantic by radiotelephone, Arlington, Va., to Paris.
- **1915** First conversation by transcontinental line, 3,650 miles-Boston to San Francisco. Speech transmitted for the first time by radio telephone from Arlington, Va., across the continent to San Francisco, over the Pacific to the Hawaiian Islands, and across the Atlantic to Paris.
- **1916** Earliest community automatic exchange network installed in Wisconsin.

The most exciting period of development for the telephone was the 20 years after the Bell patents expired in 1893. Small telephone companies suddenly sprouted up all over, like mushrooms in a wet climate. Competition was fierce. Iowa and Wisconsin seemed to have an overabundance of early adopters and telephone enthusiasts and have very interesting records of the early years of telephone service. There is a marvelous and fascinating monograph in the *Annals of Iowa by* Charles Deering, *The Telephone in Iowa*. Charles C. Deering, secretary-treasurer of the Iowa Independent Telephone Association since 1913, had been active in telephone work since 1898. He is also the son of one oi the leaders in the development of the independent telephone system in Iowa. This monograph is long, and we will pull down only a portion of it, but it is so accurate and thorough a record of early telephone use, and such a good example of how the early telephone systems developed, that it is well worth reading.

## EARLY INSTALLATIONS IN IOWA

Quite a little of the very early use of the telephone was private line service, to connect one's home and place of business, or hotel and railway station. So generally, telephones for this private line service, as well as telephones for exchange service, were rented from the parent Bell Company.

As early as 1879 there were a number of these private lines in Iowa. One was in Dubuque, where lumberman Moore had a line connecting his office and lumber yard. His son. A- A. Moore, went to

Boston and brought back these two telephones. A. A. Moore later established himself in the lumber business in Marshalltown. He was one of the organizers of the Marshalltown Telephone Company and was long prominent in the independent telephone field in this state. He was one of the organizers of the Iowa Telephone Association, a trade organization of the independent companies. Another of these early private lines was at Cedar Rapids and connected the stores of H. C. Vaites and Pope & Billaus. At Boone A. J. Barkley had a line connecting his office with the Court House at Boonesboro, two miles away.

The first commercial exchange in Iowa was built by the Western Union Telegraph Company at Keokuk. It opened for business in September 1878. The Western Union also built exchanges at Des Moines, Davenport, and Ottumwa. The first private telephone exchange in Iowa, and perhaps in the United States, connected the Burlington fire stations in November 1878. The first Bell exchange in Iowa was opened at Dubuque in June 1879. The first telephones in Des Moines were installed prior to the building of an exchange. They were on a line connecting F. M. Hubbell's office at Fifth and Mulberry with his home on Fifth, north of Grand. Davenport a few years later, in 1880, counted ninety-six telephones "in actual connection with the central office." "On yesterday," the proud Davenport Gazette reported, February 21, "orders were taken for six more, and still other applications are known to be awaiting the substitution of the present instruments for those of the Bell Telephone Company." Subscribers in Davenport had the privilege of conversing with users in Rock Island and Moline "day and night." In September 1880, Oskaloosa businessmen were looking forward to receiving a "bell telephone system." "Such a system would be greatly to the advantage of our business and professional men," the Oskaloosa Herald asserted on the ninth, "and should be secured." Earlier in the year. Cedar Rapids boasted of twenty-nine subscribers to the telephones there, and a short while later a line connecting Cedar Rapids and Marion, one of the earliest "toll" lines in the state, was completed, with twenty-five subscribers. With so few instruments in use, the telephone was for long quite a novelty, and new subscribers had to get acquainted with their uses. The Council Bluffs Nonpareil was guilty of more than a little exaggeration in 1880 when it reported that "the telephone is the greatest invention of the age, but this particular age is so well advanced that nothing seems to astonish it, and the 'speaking machine' has come to be a daily use and an absolute necessity in the transaction of business and the affairs of everyday life just as though it was down on the regular program or 'bill of fare' with the commencement of time itself," Nevertheless, many an individual, like the gentleman "from a neighboring town" reported by the Nonpareil, "who had read all about the telephone but never saw it," thought, "he must show himself to be up with the times, and glancing at one of the speaking tubes that extend through the Nonpareil office building, gravely remarked: 'I see you have the telephone in use here.' He knew such a thing existed and was willing to run the risk of hitting it by pronouncing the first hole in the wall he saw a telephone and thus prove himself to be familiar with the looks and workings of the wonderful machine." Not only was its appearance a novelty, but its use was even more so. The Dubuque Herald quoted approvingly the New York World in March 1880, which asserted, "there seems to be a popular misapprehension about conversing through a telephone. It is not necessary to roar into the instrument so that you can be heard eight blocks away. The telephone don't [sic] work on that principle. If you are talking to a man don't yell so as to disturb all peaceable citizens. Stand back two or three feet [sic] from the mouthpiece of the transmitter and speak slowly and distinctly in your ordinary voice. The telephone is not dead. Don't cry "hello" in billboard type; rather whisper in minion." That this caution was necessary to new users is the advice of the following

lines: Do not saw the air too much with your Mouth, thus: but use all gently; For in the very torrent, tempest, and (as I may say) Whirlwind of your passion you must Acquire and beget a temperance Oh, it offends me to the soul To hear a robustious, periwig-pated fellow Tear a telephone to tatters, to very Rags; to split the ears of the boys At the Central Office, who for the most part Are capable of nothing but inexplicable Dumb show and noise—especial noise. I would have such a fellow whipt for o'erdoing Termagant. It out herods Herod. Pray you avoid it.

## EARLY TOLL LINES

The parent Bell Company licensed several companies to build in various parts of lowa, and at one time there were at least as many as eighteen such licenses in this state. Seldom were there toll lines connecting the exchanges of these various licensees and often not all of the exchanges of a given licensee were connected together. The earliest toll lines were of iron, one wire, grounded, with a limit of commercial service of fifty to seventy-five miles; conversations over longer distances were usually repeated by an operator at some intermediate switching point; the strong lunged operator was a prize.

These grounded lines were subject to cross talk and to other electrical interference. One of these grounded toll lines from Boone to Des Moines paralleled for some distance the trolley line running to Valley Junction (now West Des Moines). Users of this toll line alleged that they could hear the conductor on the streetcar ring up fares. The grounded toll line was followed by the metallic (two wire) line, and copper with its superior conductivity replaced iron wire. Other advances, notably the telephone repeater, made transcontinental service a reality. Toll line connections between lowa cities were thus obviously few in the first years. An early attempt to establish telephonic connections between Council Bluffs and Des Moines in January 1880, was such important news that the Dubuque Herald, on the opposite side of the state, headlined the news as "A TELEPHONE FEAT DES MOINES AND COUNCIL BLUFFS PLACED JN COMMUNICATION BY TELEPHONE".... On Sunday afternoon last a successful telephone connection was made between Council Bluffs and Des Moines, which are nearly 150 miles apart. The wire used was a telegraph wire, with all the instruments "cut out." Manager O'Brien and Assistant Noack of the telephone exchange office at this place, connected a Bell telephone and Blake transmitter with a Des Moines wire at the Rock Island depot. The telegraph operator, Mr. Smith, of the depot office at Des Moines, attached a telephone instrument to his end of the wire, and at 2 o'clock telegraphed Operator Josslyn at the office here that he was ready for 'business.' "The circuit was then opened and conversations were carried on between the gentlemen in Council Bluffs depot and Mr. Smith at Des Moines, by telephone. "... Altogether the test was quite a success. Mr. Smith said he could hear persons in Council Bluffs and Omaha conversing with each other quite distinctly. The Edison instrument is used in Des Moines, while the Bell is used in this city. Had both instruments been Bell the conversation would no doubt have been more distinct. Of course the success of the undertaking was owing to the fact that all the telegraph wires, or nearly all, were quiet at the time. Had they been working the "sympathy" between them would have been too great to distinguish the words clearly. In long distance the telephone wire will have to be placed by itself, and nothing will prevent a conversation between Council Bluffs and Des Moines or any other distant cities. The success of Sunday's feat clearly demonstrates the fact that before long the telephone will be used as a means of communication between cities in all parts of the state, With a little more exertion we could have the pleasure of sitting in Council Bluffs, and listening to the proceedings of the legislature at Des

Moines," In the pioneer days of the eighties quite a number of telegraph men became Bell telephone managers. Another of the early toll lines was built from Des Moines to Winterset. The Iowa State Register of November 5, 1882, told of the opening of this line and said that service would be furnished free for one day, and also, "to accommodate all who desire to converse from their Des Moines homes to Winterset, little books, costing \$5.00 and \$10.00 will be provided, in the form of a thousand mile ticket; these must be left at the central office and a strip will be torn out for each 'talk' which the owner has with Winterset. Parties without books will be required to go to the central office in this city to do their talking." Try and imagine asking today's subscriber to go to the central office to make an out-of-town call! In those early days the building of toll lines was financed, in part, by the sale of such coupon books, though usually the purchaser retained possession of the book, and coupons in payment of tolls were taken out when bills were paid. Later, in the nineties, the independent companies financed the building of much toll line in this way, sometimes selling these coupons at a discount.

In 1893 there were three Bell companies in Iowa operating sixty exchanges with less than ten thousand telephones. Des Moines had less than nine hundred telephones. The possibilities oi a large telephone development had not yet been seen; rates for exchange service were high; business houses made up the majority of the subscribers' list; doctors and some others had residence telephones. In some exchanges the printed bills stated that the charge included a \$20.00 royalty to the parent Bell Company. With high rates and small lists of subscribers the value oi the service was limited; so much so that now and then an exchange had to close for lack of patronage. In at least one case (Perry) three attempts were made before the telephone exchange came to stay.

This is a partial list of exchanges built by Bell licensees in those early days. Licensees' name and year service begun are stated:

eokuk ubuque Ditumwa	Western Union Telegraph Co. Keim and Ogden Co. Western Union Telegraph Co.	187 187 187
ovenport Des Moines Council Bluffs Houx City	Omaha Electric Co. Sioux City Telephone Ex. Co., Inc.	187 187 187 188
lenwood Iaquoketa Jedar Rapids Linton	Glenwood Telephone Exchange Co. Jackson County Bell Telephone Co. Hawkeye Telephone Co. Clinton and Lyons Bell Telephone Co.	188 188 186 188
oskaloosa At. Vernon AcGregor	Iowa Telephone δ Telegraph Co. Hawkeye Telephone Co. Iowa and Minnesota Telephone Co. Iowa Telephone δ Telegraph Co.	188 188 188 188
ndianola owa City Auscatine led Oak	Hawkeye Telephone Company Red Oak Telephone Company	188 188 188
Cedar Falls Waterloo Winterset	Hawkeye Telephone Co.	188 189 186
Vebster City Vinton Atlantic Boone	Iowa & Minnesota Telephone Co. Iowa Telephone & Telegraph Co. Iowa Union Telephone & Telegraph Co. Hawkeye Telephone Co.	189 188 188
Soone Shenandoah Fort Madison West Union	Iowa Union Telephone & Telegraph Co. Iowa Union Telephone & Telegraph Co. Iowa & Minnesota Telephone Co.	188
Cherokee Colfax Ames	iowa & Minnesota Telephone Co Iowa Union Telephone & Telegraph Co. Ames and Nevada Telephone Co	188 188 188

As we see here, there is an exchange in Dubuque as early as 1879 by Keim and Ogden Co., one in Davenport in 1879 by Western Union Telegraph Co., and one in McGregor in 1881 by Iowa and Minnesota Telephone Co. The exchange in Dubuque or McGregor was extended to Gutenberg, and around the turn of the century that exchange was extended to Glen Haven, Wisconsin, by extending a wire across the Mississippi River.

With the expiration of the fundamental Bell patents in 1893, manufacturing companies were formed to make independent telephones and switchboards and the era of competition started.

Perhaps the first independent telephone exchange in Iowa was built at Jefferson by Chas. G. Cockerill, operating under the

name of the Cockerill Telephone Company. In 1891 the City Council of Jefferson passed a resolution granting the Cockerill Telephone Company the right to occupy the streets and alleys with pole lines. In 1893 Cockerill built toll lines to Farlin, Churdan and Scranton. In the early days of independent telephony in this state a number of telegraph operators, doctors and druggists were organizers of telephone companies. The telegraph operators were interested because of the kinship between the telephone and the telegraph; they had some knowledge of electrical communication. Examples — E. H. Martin of Webster City, Geo. N. Bandy of Perry and Chas. E. Wells of Boone. Doctors probably became interested for they saw its time saving advantages, and time saving is often life-saving. Examples—Dr. A. A. Deering, Boone; Dr. C. F. Bennett and Dr. G. G. Bickley, Waterloo; Dr. G. W. Greaves and Dr. Chas. McAllister, Spencer; Dr. W. F. Cram, Sheldon. Druggists' interest, it is believed came about as follows: When a toll line ran into a town where no exchange service was available, the toll line owner was anxious to have the toll station in an establishment that was open long hours; often that place was the drug store. Then the druggist sent a messenger for the called party. Sometimes a private telephone line was installed to reach a frequently called person; hence the druggist well knew the needs for exchange service. Examples - B. C. Way, Britt; Cloid H. Smith, Odebolt; J. W. Stewart, Grimes; Theo. I. Swift, State Center. Independent telephone companies were organized by citizens and local capital-built exchanges

(usually these were single exchange companies) in most of the cities and towns where the Bell Company had exchanges, and also in a great many towns which the Bell Company had thought too small to support an exchange.

These independent companies universally had low rates; they had no patent royalties to pay; they were inexperienced and had little idea of maintenance costs; none of depreciation. Competition ran wild. In dual exchange situations rates were slashed; often residence telephones were free to business subscribers. Sometimes bitter feelings were engendered between various partisans. For many years no Bell Company would connect its toil lines to an independent exchange (even in a non-competitive situation) unless the independent company leased Bell transmitters and receivers.

The Iowa Telephone Association changed its name to the Iowa Independent Telephone Association in 1906, and still represents the independent telephone companies. It is one of the older trade associations of the state. In those earlier days of the Association when there was much bitter feeling between the Bell and the Independents, some of the Association meetings had a sergeantat-arms guard the door lest a Bell spy hear what was being said.

In large numbers of these competitive, dual exchange situations, the Bell Company was able to continue in business only because it afforded its subscribers long distance service. The independent companies built some toll lines, but they were limited in extent and did not afford as much service as the public wanted. Both the Bell and the independents lacked capital for a rapidly expanding business. The independents had to depend on local capital which was hard to get in sufficient amounts and so earnings went back into plant and often no dividends were paid; this in turn made it difficult to interest investors. The parent Bell Company reduced its royalties almost to the vanishing point in competitive situations. Its investors were reluctant to put more money into a western subsidiary where competition was rampant and no dividends were in sight. Neither side knew how hard up the other was. This competitive situation continued for many years. There were towns with as many as three exchanges; one Bell, one Commercial Independent, and a Farmers Mutual. In 1905 there were 147 lowa towns with two exchanges. During this period the public became fed up with these dual exchange situations. To get full service the subscriber must have two telephones; two directories to consult, the ringing oi two bells caused confusion, and there were two bills to pay. In no other line of business is competition such a nuisance and so intolerable. Due to the public demand and to the economic waste, consolidations took place, starting about 1909. One company would buy out the other and consolidate the exchanges in a town.

In a general way, the company with the most telephones in a town would buy. It took several years to bring about results but in the end all but five of the cities and towns received unified service. In some of these places dual exchanges remain to this day.

These years of competition, bringing low rates, keen solicitation for business, genuine efforts to establish good public relations brought about a development of the business, a saturation point previously undreamed of.

RURAL, FARM PHONES

There was little development of rural telephone service until the advent of the Independent companies. In the early days solicitation of farmers to take telephone service met with poor response. Many a farmer looked at the telephone just as the businessman had done many years earlier and said it might be a nice thing to visit over, but that it had little practical value for him. However, in the late nineties the telephone was in much more general use in the cities and towns than ever before, and a rapid development of rural service took place. Often the telephone company encouraged groups of farmers to build their own rural lines up to the city limits and there the exchange owner connected and did their switching for a low fee. Such farmer-owned lines are called service station lines or switchers. The exchange owner was prompted to encourage the farmer to build his own telephone lines because of difficulties in financing; the farmer became interested because he could furnish part of the labor and keep down first cost and get a switching rate that was much lower than the regular rental. Most of this sort of development took place during the days of dual exchanges; when the farm line contract expired there was intense rivalry between the two exchange owners to secure the new contract, not because of the revenue it brought in, but because of the influence on the town subscribers. Hundreds of country schoolhouse meetings were held on these contract renewals; the Bell man and the Independent were given cm opportunity to present their arguments and quote switching rates.

This rivalry ended with the passing of the dual exchange situations. There are many of these lines in service today; perhaps 3500 or 4000 of them. Slowly, gradually, these service station lines turn to the exchange owners to furnish them complete service. In the majority of cases, obviously, farmerowned lines will not be well maintained and when the time comes for complete rebuilding, the service station line often says to the exchange owner—"You take over, you're in the telephone business." Some of the early farm lines used the top wire of the fence as a conductor; sometimes they insulated it, often not. Glass bottles were sometimes used as insulators. Often two-by-fours were used to raise the wires sufficiently high for clearance at gates and highway crossings. For several decades census figures—we have two sets of census figures; the general census taken every ten years, and the electrical census taken every five years, the last one in 1937—have shown that lowa has more farm telephones per hundred farms than any other state. The highest saturation was reached in 1920 or soon thereafter; eighty-six telephones per hundred farms.

There is other interesting information in this monograph about how early telephone lines were simply strung across roofs, about the need for insulated wires, about the dangers of using the telephone line during a thunderstorm, etc. In some exchanges the operator rang every subscriber every morning and said, "Morning test, ring off." The early telephone booths of the gay nineties were beautiful, ornate things, double-walled, with silk drapes.

The first telephone appeared in Wisconsin in 1877 when Appleton banker Alfred Galpin ran a line from his residence to the bank. Several months later, he built a homemade switchboard for twenty-five telephones in Appleton. Rivaling Appleton for the earliest telephone was Platteville, (30.5 miles from Bloomington, and 53.8 miles from New Glarus) having one at least as early as 1878. Richard Valentine made a private line for himself and one for his brother in Janesville in 1877. In 1878 he built a line for the editor of the Berlin Journal and one for the Sheboygan and Fond du Lac Railroad in Dartford. Valentine visited Milwaukee to present the possibilities of the telephone to manufacturers there, he was laughed out of town. In 1879 Charles Haskins brought the telephone to Milwaukee, as a representative of the Bell Telephone Co. and his firm developed into the Wisconsin Telephone Company. In the 1880s telephones spread to cities across Wisconsin. Madison had a very large exchange before 1900. Larger cities provided more opportunities to expand, so small towns and rural areas developed their own lines, and rates were sometimes very high. The telephone remained a luxury throughout the 1880s. When the Bell patents expired in 1893, small, independent telephone companies spread across the state, some as cooperatives, others as corporations. The Wisconsin Telephone Company and its parent Bell competed fiercely with the small companies, who fought among themselves as well. Subscribers to the service of one company could not talk to those of another unless they wanted another line. Long-distance calls had to be made on the Bell lines. In 1907 the state government granted the Railroad Commission of Wisconsin the right to regulate the utility. Bell and the independents worked together to connect the various lines across the state with many smaller companies selling out to the Wisconsin Telephone Company, which soon dominated in the larger towns and cities. In 1890 there were less than three telephones for every thousand people in Wisconsin. By 1926 there was a telephone for one in every five people. Madison had 17, 637 telephones.

There are interesting anecdotes about the first use of telephones:

*Incidents in the Early History of the Wisconsin Lead Mines* – Wisconsin Magazine of History, D. J. Gardner: "General Grant came again in 1878, and had a public reception at the residence of Major Roundtree; while there, some gentlemen from Lancaster, Wisconsin, wished to talk to him over a telephone, which had been built by Capt. W. H. Beebe – one of the first telephone lines in southern Wisconsin, if not the first. General Grant was sent for and came to Captain Beebe's office, and for the first time in this life used the telephone." (The distance from Lancaster to Bloomington was 14.8 miles. This exchange was probably the one used by Bloomington in the village.)

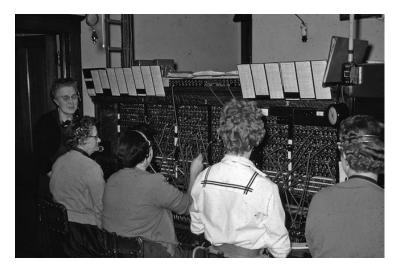
"Another incident of note – I think in the session of 1880 – was the stringing of a wire from the Capitol to the University, over which wire people were able to talk to one another. This was the first telephone in Madison. Ladies – among them my wife – tried the instrument, and they would turn and giggle and laugh when they heard the voice at the other end."

La Crosse's first telephone exchange was installed in 1881 by the Wisconsin Telephone Co., only the fifth switchboard in the state after Milwaukee, Racine, Oshkosh, and Appleton. The La Crosse Telephone Co. was incorporated in 1893 and, after several years of competition with the Wisconsin Telephone Co., purchased its competitor's outside wire plant in 1919. Lacrosse is 77 miles north of Bloomington, on the Mississippi River.

A telephone exchange that became important for Johnnie and me in Wisconsin was the Brodhead Telephone Company because it was to this telephone exchange that the important cheese center New Glarus connected. New Glarus controlled much of the cheese and canned milk industry in southwestern Wisconsin then, and the milk we produced on our farm was ultimately sent to New Glarus. Broadhead was 26 miles northwest of New Glarus and an early adopter of the telephone, perhaps because of its proximity to Madison, 36 miles away.

The Brodhead Telephone Company was formed in 1899 when businessmen of the town met in the office of Dr. T.W. Nuzum to lay plans for the first telephone system. These men formed the Brodhead Telephone Company, with plans to construct equipment necessary to serve 60 telephones. The Jones and Winter Construction Company put in a bid of \$3,000 for the work, and the fledgling telephone company authorized them to go ahead.

The first operator of the central office, which was located over the Green County Bank, was Fred Cole, who received \$25 a month for the job. Receipts for February 1900 included \$75.80 for exchange service, \$20.00 for toll calls, and \$2.20 for messenger service; a gross income of \$98.00.



Women entered the telephone business just after the turn of the century, and the first lady operators at Brodhead were Mrs. Letha Farnum, and Miss Abbie Emminger who received \$15 and \$18 a month for the work. In 1908, the expanding company hired Harry Cox as the first manager, and he served until his death in 1943. Mrs. Lulu Mattison, pictured here, the present cashier at

the Brodhead office, was hired as a part-time operator when she was still in high school in 1913. Since that time, Mrs. Mattison has held just about every job at the telephone office. She has been an operator, chief operator, bookkeeper, cashier, and manager of the Brodhead exchange. There was a time when she computed and made up the bills as cashier, worked as chief-operator during the day, and occasionally filled in as the night switchboard operator. Another local telephone veteran is Frank Maveus, who recently retired as an installer-repairman in the exchange after completing 42 years of service. He began work for the Brodhead Telephone Company in 1913 as a trouble shooter and lineman. Frank recalls that he hunted for trouble with a horse and buggy in those early days, and the first trouble truck was a model T Ford.



This photo shows the Brodhead Telephone Company operators riding on a parade float in 1925. The photo caption simply says "Maude" which indicates Mrs. Maude Bowen is one of the ladies. In 1910 there were 5.8 million telephones in the Bell Telephone/AT&T network. The Company focused on developing service in the business centers of the East Coast, then spread out to

all the areas around the shipping and transportation hubs like the Great Lakes, along the great rivers, the upper Midwest, especially the Chicago area, and the great commercial centers like Kansas City, St. Louis, even cities like Milwaukee, Madison, and Des Moines. Smaller independent networks were focusing on providing services for the rural areas, connecting to the large trunk lines.



Between 1907 and 1910 Bell Telephone bought up most of the small telephone exchanges in southern Wisconsin. When Johnnie and I moved to the Harper farm, we were immediately able to talk by telephone with everybody on the Bell network, including our families in New Vienna and

South Dakota, as well as people in the village of Bloomington and New Glarus (for the dairy business.).

By 1910 Bell Telephone had lines running from Platteville to Lancaster and on to Cassville through Beetown, with an offshoot to Bloomington. In Iowa the Bell Telephone Company had lines from Dubuque up along the river, through Dyersville and New Vienna, to Gutenberg. There was a line crossing the river at Potosi in Wisconsin, but none in Gutenberg to Glen Haven, so the Gutenberg/Glen Haven line was a local line that connected to the Bell network in order to make long distance calls.

But there was a lot of telephone service in Wisconsin and Iowa prior to 1910.

From the history of Glen Haven: "A further progressive step was taken in 1900 when the Standard Telephone Line was extended across the river from Gutenberg to Glen Haven. The line was strung high above the river from the summit of one bluff to that of the other. The first operator of the line was Frank Barr. A few years later John Jamison of Beetown established a telephone line which thrived and developed into the Farmer's Telephone Company. This line at first reached only as far as the James Metcalf farm, but it was soon extended into Glen Haven proper. In October 1910 Mrs. Rose Thiessa assumed operation, at which time only twelve lines were used, including both town and country subscribers. The operator system was replaced by the modern dial system in 1960."

*From the* February 20, 1902 Bloomington Record newspaper: "The Lancaster stage man was so busy looking at the girls in Beetown that he forgot the mail and was notified at Maiden's place by telephone on Tuesday." This meant that Beetown was connected to the Lancaster Exchange as early as 1902. Beetown is 7 miles from Bloomington, and it is highly likely that Bloomington immediately connected to the Lancaster exchange through Beetown. Beetown could also have been connected to the lowa line through Glen Haven, 11 miles away, or through Dubuque, an early adopter. This means that potentially there were probably three independent telephone exchanges available in Bloomington by 1902: the Lancaster exchange, the New Glarus exchange, and the Beetown/Glen Haven exchange that may have made telephone connection possible to New Vienna by 1902. Their drawback was, of course, that they did not talk to each other nor long distance, so people might have had to subscribe to several telephone exchanges and then pay a toll fee for long-distance service. The Harper farm was on the fairgrounds road, which would have been one of the first rural roads to be connected in Bloomington.

1916 "THE BIGGEST LITTLE TOWN IN WISCONSIN" mailing envelope: "Bloomington has 700 people and bank deposits of \$800,000. Has four practically new churches – Methodist, Congregational, Baptist and Catholic. Seventy-five automobiles owned in the village. Has \$15,000 waterworks system and \$12,000 electric light plant. The Bloomington Concert Band of 30 pieces is the finest band in Southwestern Wisconsin."

It is interesting that on this mailing envelope that extolls the benefits of living in Bloomington, no mention is made of telephones. Telephones were by that time so common in Bloomington that they were no longer noteworthy. There is mention in the Bloomington Record newspaper August 6, 1912, that "Frank Riese is an expert telegraph operator."

Bloomington has 700 people and bank deposits of \$800 new churches—Methodist, Congregational, Baptist a five automobiles owned in the village. Has a system and \$12,000 electric light plant. Th Concert Band of 30 pieces is the find	and Catholic. Seventy- \$15,000 waterworks re Bloomington
in Southwestern Wisconsin.	
Bloomington supports a \$500 lyceum course each winter and a \$1,200 chautauqua in the summer, and the Bloom- ington Fair is a success- ful annual event. Bloomington is not on	Bloomington has a magnificent public school system, including a state school for the deaf. Is located in the richest agricultural sec- tion in Wiscon- sin.
a railroad—is 14 miles from 1	Lan-
caster, on the C. & N. W. Ry.; 12 m	niles from
Bridgeport, on the C., M. & St. P. Ry., and	1 10 miles from
Glen Haven, on the C., B. & Q. Rybut is willi	ing to give substan-
tial aid to any legitimate proposition that will b	ring in a railroad and
know that such an enterprise would pay. Bloomi	ngton is the best inland
town in the United States, and is also "The Biggest	Little Town in Wisconsin."

"The Biggest Little Town in Wisconsin"