4. The Spread of Cattle Guards, 1920 to 1930

Published by

Skaggs, Jimmy M. and James F. Hoy.  
The Cattle Guard: Its History and Lore.  

⇒ For additional information about this book  
https://muse.jhu.edu/book/81026
The influence of the cattle-guard innovators of the first two decades of the century was felt both directly and indirectly during the twenties, a decade when the use of cattle guards increased along with the number of automobiles on the roads. The growing number of rural mail carriers, most of whom had switched to automobiles during the late teens, also accentuated the need for cattle guards. During the twenties also, the pit-and-pole guard became the standard design. Some ladder guards and trough guards were installed during the twenties, especially in Texas, Oklahoma, and Nebraska, but heavier vehicles (particularly grain trucks and oil-field equipment) moving at faster speeds soon proved the superiority of a guard that, if properly constructed, could stand up under extremely heavy loads and could handle two-way traffic.

Only in some of the sparsely populated non-oil-producing regions of Texas and Nebraska could the trough cattle guard be found after the twenties. I have been told, although I have not been fortunate enough to find any, that the decaying remains of a few old-style auto gates, long fallen into disuse, can still be seen in some remote areas of the Nebraska Sandhills. The first attempts, some of them successful, to manufacture cattle guards commercially were also made during the twenties.

Possibly because of Andrew Johnston's active role in livestock organizations, his wooden-pole cattle guard quickly spread throughout the western Dakotas and eastern Montana. Old-time cowboy "Slim" Zimmerman of Af-
ton, Wyoming, for instance, remembers a pine-pole cattle guard in 1928 on a ranch seventy miles from Miles City, Montana. The poles were kept apart by spacers, but they were placed loose on the stringers so that they would move underfoot and thus deter livestock more effectively.

Sheila Robinson of Coleharbor, North Dakota, cites an example of a more direct influence of the Johnston guard. Her father, Matt Crowley of Hebron, North Dakota, was a friend of Johnston's and "no doubt heard about this idea not long afterwards [i.e., after Johnston built his first guard], probably at a meeting of the Western North Dakota Stockmen's Association." Mrs. Robinson, who was born in 1920, remembers many cattle guards on their ranch. She frequently crossed one in particular that was located between the main county road and the pasture where their cattle were summered. This guard was made of ash poles, some of them not too straight, placed over a hole with dirt piled on either side. The poles were about four or five inches in diameter and were spaced nearly one foot apart. The guard was about seven or eight feet across, and Mrs. Robinson remembers that one had to drive uphill to cross and that the car occasionally scraped on the bottom. If the pits were not deep enough on these wooden-pole guards, according to Mrs. Robinson, livestock would step between poles and walk across, and some of Crowley's horses would jump over the narrower guards. Mrs. Robinson regrets that they never took a photograph of one of these old cattle guards: "They were just a labor-saving device, and rather crude—not worth a picture back then."

Another early inventor whose guards had a direct influence was Spencer Allen of Idaho. Mrs. R. Wilkinson of Henderson, Nevada, remembers that in the late twenties her father, I. E. Bradley of Malad City, Idaho, installed a metal Allen Cattle Guard in their driveway. I have not been able to trace any direct influence from individual inventors other than Allen and Johnston. Instead, in typical folk fashion, the cattle guard and its lore have generally spread anonymously.

By the twenties the use of cattle guards was widespread in the plains states and was making steady headway into many other regions as well. For instance, in the Far West a pipe-grid cattle guard was being used in Lake County, California, by mid decade. Guards in this area usually had pipe bars that were spaced and boxed in on the ends. These bars were attached to loose rollers so that they would roll under the feet of livestock (much like a railroad cattle guard that was being marketed at the same time). According to one informant, David E. Smith of Olathe, Kansas, if a Model T stopped on one of these grids, it would often spin the loose pipes when the driver attempted to go forward. Because the cars were so light, they did not have enough traction to avoid getting stuck.

There were also cattle guards in Washington State in the twenties, at least one of which was built by Emil Lindgren on his farm in Wahkiakum
County near the mouth of Deep River. Lindgren dug a shallow pit six feet long and ten feet wide and put in two logs for a base. On these stringers he nailed tough spruce limbs for bars. This guard lasted, in spite of the rainy climate of coastal Washington, until 1945, when Lindgren's daughter and her husband, Mildred and Ivan Jones, who had bought the farm, replaced the old guard with new supports and with bars of four-by-four lumber tapered to about an inch in width on top. This type of bar was being used in the central plains during the twenties, and it is possible that Jones, who had moved to Washington from Beloit, Kansas, may have seen some of these tapered bars before moving west.

During this decade, cattle guards were also moving eastward. The Ozarks of Missouri had large areas of open range where cattle and razorback hogs ran free, and it was the landowner's responsibility to fence animals out of his fields, not the stockowner's to fence them in. Cattle guards were used to help with this fencing in Missouri, as well as in Arkansas. As late as the 1940s in Eminence, Missouri, cattle guards were used between the front yards of houses and the street. Because the open range extended into the town, cattle guards (sometimes called razorback guards in the Ozarks) were the most effective way to keep hogs and cows out of yards. In fact, according to Ralph Ricketts, when the courthouse doors were kept open for ventilation on hot summer days, "there was nothing to keep the hogs and cattle from getting into the courthouse if they really wanted to get in."

I was surprised to discover that one of my great-uncles had built the first cattle guards in Cheyenne County, Colorado. Essie Alexander of Riverton, Nebraska, a second cousin whom I had never met, wrote to tell me that her father, Clark Wright, had built some cattle guards in the late teens and early twenties on his ranch between Kit Carson and Wildhorse. As a boy I visited
Uncle Clark and was fascinated with his collection of arrowheads, buffalo guns, branding irons, and all sorts of other historical items, but I was too young to pay any special attention to the cattle guards. The original cattle guards he built used railroad ties turned on edge for bars, although these were later replaced with pipe grids, according to his daughter.

In western Kansas, pipe-grid cattle guards were being used in the early 1920s. Elmer W. Sass of Nevada, Missouri, was six years old when his father bought a farm near Kendall, Kansas, on the border between Hamilton and Kearny counties. The father had built a dugout where his family lived for several years. The son remembers that there was much open prairie at the time, and if people wanted to keep stock out of their fields or within a certain distance of home, they had to fence. A cattle guard was already in place on the northwestern corner of their quarter section when the Sass family moved. The guard had stringers of heavy timber, notched to hold three-inch pipe bars set over a pit two to three feet deep. The guard was built for light traffic, and Sass says that he cannot remember any trucks at that time.

Farther east and north, in Trego County, two pit-and-pole cattle guards were being used on the Lynd Ranch in 1925. Three years earlier, even farther east, E. T. Anderson had installed a pit-and-pole cattle guard at the entrance to his ranch in Morris County, north of Hymer. Anderson’s ranch was located on the western edge of the Flint Hills, and during the twenties this major grassland became filled with cattle guards, particularly in oil-lease areas such as Teterville in northwest Greenwood County. Conwy Rees of Emporia had some steers on pasture at the head of Fall River during the early twenties; he remembers seeing his first cattle guard then in that area. Mary Etta Funk Davidson saw her first cattle guards in the Flint Hills of Chase County near Shaw Creek in 1927.

Many of the early Flint Hills cattle guards are gone, but evidence of their former existence can still be seen. The first cattle guard that my father, Kenneth Hoy of Cassoday, can remember was north of town; across the Butler County line into Chase County on Kansas highway 13 (now K-177), which was at that time (and continued so well into my memory) a graded sand road. This cattle guard was made of pipe bars and was used for several years before the roadway was completely fenced. Today only a concrete post remains beside the road to mark the spot where this cattle guard, built in the early 1920s, once stood.

Occasionally, while driving the back roads of the Flint Hills, one will drive over the remains of a concrete foundation. Although most people would not notice these concrete outcroppings, unless they jutted above the surface of the road far enough to cause a bump that was more severe than usual, these foundations almost invariably mark the pit where a cattle guard once was. One of these pits, located near the Satchel Creek Ranch in eastern Butler
County, is the earliest cattle guard remembered by Lowell Scribner, a ranch worker and lifelong resident of this area. This cattle guard was built in the mid twenties, and Scribner thinks that the pipe bars, or what is left of them, might still be buried in the dirt and gravel of the road.

No trace at all remains of the first cattle guard remembered by David and Alfred Mercer, lifelong ranchers in the Cedar Point-Matfield Green area of southern Chase County. In the early 1920s the Mercer family lived in the sparsely settled bluestem pastures west of Matfield Green, and the road that led to the town, several miles away, went through the Dean pasture and its two wire gates, which David and Alfred's older sisters, Bessie and Ruth, had to open and shut each time the family went to town. During the school year, this opening and closing became more than a little tiresome. Not only that; their father's large-scale ranching and farming operation required several hired men, and William Mercer did not particularly like the length of time it took some of them to open a gate, drive through, then shut it and start driving again. Whether for the convenience of his family or for the economy of his ranching operation, he decided to put in cattle guards. Neither of the Mercer brothers knows just where his father got the idea, but sometime in the early twenties, William Mercer cut down ten hardwood poles and two hedge posts, then he dug a small pit in the road, put the posts down running with the road, and placed the poles over them, crosswise to the road, thus forming a grid of spaced bars. The cattle guard he made was rather narrow, so in order to keep cattle from attempting to jump over it, he tied some black rags to it that would flap in the wind. The gate that the guard replaced was rebuilt at the side of the pit. This entire process was then repeated at the second gate on that road.

Unfortunately, Mercer had neglected to inform county road officials of his industriousness, and when the drivers of the mule-drawn road graders came upon the cattle guards, rags flapping in the breeze, they were less than enthusiastic about the innovation. Despite the unhappiness of the county officials, these homemade cattle guards remained in use for three years, at which time the county replaced them with pipe cattle guards, charging all the expense to Mercer's taxes. Cattle guards still stand on the open-range road that runs through the Dean pasture, but the pits are now lined with concrete and the bars are made of lengths of railroad rail.

William Mercer's idea for a pit-and-pole cattle guard may have been original, or he may have derived it from some trough cattle guards that had been installed earlier on the Farrington pastures a few miles southeast of his ranch. These pastures were run by the Crocker brothers, Ed and Arthur, whose father first moved to Matfield Green in 1867. Later, his sons had large-scale ranching interests in both Texas and Arizona, as well as in Kansas. In December 1979, when Mason Crocker, Ed's son, had just sold the home place
and half of his Flint Hills pasture acreage and was getting ready to move to his Texas home, he gave me an old issue of *Kansas Farmer-Stockman* magazine (15 September 1920). It contained an article about his father and uncle, “Where Cattle Graze on a Thousand Hills,” one of the earliest printed accounts of cattle guards:

In our drive back to the ranch house, after spending nearly a half day in the pastures my attention was drawn to a new and mighty convenient scheme the Crockers have adopted to get away from pasture gates. They have replaced their gates with an arrangement similar to the cattle guards used at railroad crossings. A pit is dug where the gate swings open with a guard at either side. Small poles are placed across the pit, about a foot apart. Across these poles ten or twelve inch boards are laid to form a track for automobiles to cross, thus eliminating the necessity for gates.

Crocker said that there were five or six of these modified trough-type cattle guards at various places on their property. They were replaced with gates in the 1930s because the poles had weakened and because the tenant house on the Farrington place had been torn down and there was no longer a need for the guards.

Although neither the Mercer nor the Crocker guards have survived, one built at about the same time in central Lyon County can still be seen. It is located at the entrance to Frank Arndt’s farm, just south of Emporia, but the pit has been filled in and only a few of the original bars are still visible. This cattle guard was quite narrow and lightweight, having been built in the days of Model T traffic, so the Arndts have installed a newer guard made of pipe next to the old one.

The original guard was located several yards to the north of its present site, according to Ruth Lynn, who lived on the farm when the cattle guard was first built by her father, Dan James. He had seen several cattle guards in the oil leases near Teterville, so in 1927 he dug a pit, ran a rectangular concrete foundation approximately eight and one-half feet by six feet with five-inch walls, then ran two concrete cross walls in the pit just where the wheels of his Allen car would go. He next put down a series of iron T-bars, flat side up and three and one-half inches apart, into the wet cement in order to form the grid. Thus, he had a cattle guard, probably the first in the Emporia vicinity.

Five years later the road was widened, so James decided to move his cattle guard to its present location in order to obtain better ditch drainage. Those were depression times, so when a young man came by and offered, for ten dollars, to dig up the old foundation and move it to the new hole that had already been dug, thereby saving the cost of new concrete, he was given the job. First he dug all around the walls, then he cut some skid poles in the timber nearby. After jacking up the concrete pit and sliding it onto the skids, he
started pulling it to the new hole. Unfortunately, the concrete had not been reinforced, and the vibrations caused by the dragging skids caused the walls to break apart completely. So James had to buy and pour new concrete after all, although he was able to use the same T-bars for the grid.

So far, I have found only one original Flint Hills cattle guard from this period still in use, and even that one has been supplemented with a second guard. These dual guards are at the entrance to the Morris pasture immediately west of the abandoned townsite of Teterville in northwestern Greenwood County; a concrete pit marks the earlier one. Walt Arnett, a lifelong cowboy in the Matfield Green area, is of the opinion that this cattle guard is the oldest one extant in the area and that it was built in the early twenties.

According to C. E. Dauman, who lived near Hamilton, Kansas, for many years, the Teterville oil field contained some of the earliest cattle guards in Greenwood County. This belief is supported by A. G. ("Jim") Young of Cassoday, who was reared and still lives just a few miles south of Teterville. He especially remembers two early-day cattle guards in that area, one of which was on the road running east toward Eureka along the south side of the Mosby pasture. This cattle guard, built either by the county or by oil-field workers, was made of small pipe interspaced by stringers made of strips of metal nailed onto used oil-field timbers. The second cattle guard was on the trail from Young's place to Cassoday, some dozen miles north and west. No real road into the town existed at that time—the Youngs had to travel along the ridges of the hills until they came to the flats a couple of miles east of the Watkins Ranch. There the trail met the township road at the corner of a pasture, and at that entry point there was a cattle guard made of two-by-tens turned on edge. Both of these cattle guards, built during the early twenties, have long since rotted away.

In Texas during the twenties, cattle guards of all types were being used, although, particularly in oil country, the pit-and-pole guard was becoming dominant. John Shaw, who reported that he saw cattle guards in 1913 in southwestern Texas, also saw many of the metal-bar type on a trip from Laredo to Hebbronville in 1924. O. E. ("Whitey") Cowsar worked most of his life as a carpenter in the oil fields. He first saw cattle guards, with bars of two-by-sixes laid edgewise, near Wink, Texas, in 1917. He remembers welders making cattle guards of pipe in the leases near Breckenridge and Graham in the twenties. Cowsar thinks that the availability of welders contributed greatly to the increased use of cattle guards. He also remembers more than once when welders had to be called in to cut pipe from a cattle guard in order to free horses that were caught, but he does not remember any cows in similar predicaments. He also says that people sometimes made money by charging motorists a quarter to drive through their property in order to avoid a mudhole on the road or by charging them fifty cents to pull them out if they got stuck
trying to drive through the mud. As a young man, Cowsar was once hired to haul water to a mudhole in order to keep it good and sticky.

Roy ("Cap") Carpenter of San Angelo recalls a cattle guard that his father had built in Limestone County, Texas. The elder Carpenter, who had arrived there in 1908 as a demonstrator for the Reeves steam tractor, later became manager of the Riley Ranch. In 1923, two years after their Reeves tractor had quit running, Carpenter used the boiler flues for the bars on a cattle guard, the same grid material used by Riggs and Hurley on the cattle guard they had built in Erath County in 1913. The flues were about eight feet long, wide enough for the automobiles of the time and strong enough for all but heavy truck traffic. "Cap" Carpenter said that the bars were spaced about four inches apart, "and I never saw any cattle, horses, or mules try to cross. As the guard was about 100 yards from our house, we had ample time to observe the stock's behavior." Instead of digging a pit, Carpenter simply put the bars on a frame about a foot high and graded an approach ramp from each side.

While many cattle guards were being built in the twenties for oil workers, many were also being built for rural mail carriers. Rural free delivery had been established by law in 1896, and in 1916 the postmaster general noted that the automobile had come into widespread use for mail service. My research has not uncovered any postal-service directives about the duties of mail carriers regarding the problem of opening and closing gates. W. C. Mills of Lake City, Kansas, relates an anecdote about a mail carrier who was not scrupulous about shutting the gates on the Mills Ranch:

Mailmen didn't like to mess with gates, and one we had was particularly bad, so I laid up for him one day just below the mailbox in a draw where he couldn't see me. The mail carrier had a guy with him who used to work for us, and he told this guy just to throw the gate open. "But what if Toke was watching? Would you still leave the gate open?" Toke was my dad's nickname. The mail carrier said, "I don't care who's watching. I'd throw it open." He didn't know I was laid up where I could hear him.

When they left I followed (I was on horseback), and I let them get far enough that I knew they weren't going to close the gate, then I tried to catch up with them. It took a while, but I caught them at the next mailbox. There was an auto gate [i.e., a cattle guard] there, so he hadn't thrown any gate down. When I rode up I told them to get out of the car and for Frankie, the guy who had worked for us, to get out of the way. He asked what I was going to do, and I said I was going to whip the hell out of that mail carrier if he didn't close our gate.

Well, they drove back to the gate and I followed along and saw him close it. Later that day I had driven the team in for a load of cake and I went into the post office and there he was, looking
through the book of regulations. I guess he couldn't find anything that proved I was wrong, because he always closed our gate after that.

I remember that later this same mailman told one of our neighbors that he'd have to move his mailbox because there was a big mud hole beside it and he had trouble leaving mail there. But the neighbor said he could move the mailman easier than he could the box, and he started to circulate petitions to get him removed. Well, the mail carrier started some petitions of his own to keep his job and he asked me to sign one. I said sure, he'd always closed the gate after I asked him to that time, so I signed his petition.

The problem of the mailman and the gate was resolved in the area around the Mills Ranch by the installation of cattle guards, a solution that was also widely used in the Sandhills of Nebraska.

Lewis E. Phillips of Kimball and his brother, William Henry, built two cattle guards for their mail carrier, Andy Batterton, in 1924. Phillips thinks that 1920 was about the year that mail carriers switched from teams to cars in all of western Nebraska. The Phillips brothers had fenced a section pasture through which the mail route ran on their private ranch road. They built, on this road, trough cattle guards over pits three feet deep and five feet wide, using railroad ties for stringers. Troughs of two-by-sixes were spiked to the ties. The sides of the troughs were sloped out, so that both cars and trucks could move across easily. Lewis Phillips explains how he got the idea for building the guard: “We felt horses and cattle would not attempt to jump a pit with obstructions over it. We just used material we had available at the time.”

Phillips also said that Kimball County did not start grading roads until 1919. In 1920 he bought the first pneumatic-tired commercial truck in the area, and he hauled wheat over roads with some very deep ruts. As late as 1928 he used to drive from Kimball to Crawford, opening and shutting gates all the way, for not a single cattle guard had been installed on that particular road. After the county began to grade roads, a few of the wealthier ranchers obtained permission to install pit-and-pole cattle guards, using pipe for bars, concrete for pit walls, and steel I-beams for stringers.

Ralph R. Robinson, who ranched in Cherry County north of Mullen, Nebraska, in the early twenties, was on a mail route that was over one hundred miles long and had more than sixty gates. In order to decrease the number of gates for the mail carriers, as well as to make things easier for the ranchers and their families, the county commissioners installed a number of ladder guards. According to Robinson, these were made by taking eight-foot lengths of bridge plank and then drilling holes part way through them in order to hold the fourteen-inch lengths of one-and-one-half-inch pipe used for bars. Like the ladder guards described in chapter 3, these ladders were
held in place by long rods bolted through the entire guard, and they were placed over a pit that was three feet deep. "The wooden and pipe guards were right for the Model T and A," said Robinson, "but when trucks started using them, they didn't stand up too well. It also got so the planks were of poorer wood all the time. In the Sandhills the sand blew and the auto gates as a rule were a little higher than the road. If cars and trucks didn't slow up, they would land in the middle of the gate. Even the steel auto gates got damaged that way." So, no doubt, did automobiles.

The earliest commercial manufacturers of cattle guards seem to have been Nebraskans. On 8 June 1922 the Antioch News published an item about a new industry for Antioch, a factory to manufacture automatic auto gates. The inventors, Walter Hoffland, William Connor, and Frank Rogers, were trying to capitalize on the inconvenience caused by having to open and close twenty-five to fifty gates that, according to the article, had to be opened and closed if one took a fifty mile drive in any direction from town. The reporter felt there would be a demand all over the West for thousands of the gates, which he then described:

Timbers slightly raised from the ground are placed as a track for cars to run over. On each side of the gateway is erected a post from the bottom of which there is a gas pipe extending from post to post beneath the runway. Attached to the pipe are fingers the height of a gate kept in upright position by means of a spring fastened on each post horizontally and attached to the bottom bar. As a car approaches the gate, the front pushes against the fingers, lays them down between the timbers of the runway and after being released when the car passes over, the springs throw them back in position.

Hoffland and his partners were right about the demand for cattle guards, but their particular design was apparently too complicated to be commercially successful. According to Raymond R. Gentry, who ranched at Hyannis and now lives at Alliance, the fingers that were pressed down often came back up too suddenly, thus damaging the bottoms of cars as they were being driven across the gate.

More successful was the C & P Auto Gate Company of North Platte. The story about C & P comes from Everett Troyer, the long-time owner of the company and a son-in-law of one of the founders. In 1922, when Ira E. Cumpston was driving his Model T from his home in Tryon, Nebraska, to Hyannis, he had to pass through numerous gates all along the way. In one place, however, he drove across a series of poles running across the road and nailed into some timbers, which were placed in a pit and ran with the road. He was impressed by the time saved and the convenience, so he approached the commissioners of McPherson County with the idea of installing some of these auto gates on roads there. He called in his brother-in-law, Lyle Pyzer, a

66
skilled carpenter, and the two of them agreed on a design. First, they decided that pipe would be a more uniform and permanent material for the bars than poles would be. To arrive at the optimum spacing of the bars, they made the pipes adjustable and tested them by having ten horses of various sizes walk over them. They placed the pipes as close together as possible for a smooth crossing, but far enough apart so that if a horse got in the guard, he could pull his hoof out and not be trapped or injured.

Their next step was to build by hand a few guards in Tryon and then to place them on the most heavily traveled roads in McPherson County. These guards used three-by-twelve-inch wooden planks for the sides and two-inch pipe for bars. They worked so well that within two months, officials in Arthur and Hooker counties had asked Cumpston and Pyzer to build guards there as well. At this point the two men formed the C & P Auto Gate Company. To do the drilling and cutting, they built machines which they mounted on trailers. Because Tryon was not on a railroad, lumber was shipped to either Mullen or North Platte, where the guards were assembled. In its effort to make the wooden part of the guards more durable, C & P had lumber from the West Coast shipped to Denver. A crew would go to Denver with the milling machinery, mill the lumber, then have it pressure treated before reloading it on cars and shipping it on to Nebraska. Even so, the wood did not hold up well under the progressively heavier traffic, so a decision was made to manufacture the guards entirely of metal. Because he was a carpenter, Pyzer lost some of his interest in the operation when this change was made, so he sold his share of the company to Cumpston in 1940.

At about the same time, the entire operation was being moved to North Platte, partly because there was not enough electric power in Tryon to run the welding equipment necessary for the increased demands of manufacturing. In 1954 Cumpston sold the company to his son-in-law, Everett Troyer, who ran it until he retired in 1970. Since then the company has changed managers several times, until, in 1977, the manufacturing equipment was sold at auction. Although Troyer still has a small shop in North Platte, he no longer takes on any large-scale projects. Over the years, C & P made and sold thousands of cattle guards in many states. Many of their first all-steel guards, made in 1940, are still giving good service on Nebraska roads.

During the 1920s an interesting problem with gates was developing on the Fort Berthold Indian Reservation in North Dakota. Marion Everhart of Scottsdale, Arizona, has provided copies of the correspondence between E. W. Jermark, superintendent of the reservation, and the commissioner of Indian affairs. On 19 November 1921 Jermark sent a letter to Washington in which he described the problem with fences and gates:

There is approximately two hundred miles of boundry \( [sic] \) fence. To keep this fence in repair I am employing four lineriders.
The fence is built of native box elder and ash post and as it has been a number of years since the posts were renewed, these four lineriders have almost a hopeless task in trying to keep it repaired.

At this point I desire to call your attention to the fact that the salaries of these men is $48.00 per month, including the bonus, which you readily see is scarcely sufficient compensation to warrant obtaining the services of a man and saddle horses necessary to make the long rides. Another and very serious difficulty arises and that is with the white lessees on this reservation. Numerous gates have been cut in the fences. These gates provide the means for much of our trespassing stock.

The average white man as well as the Indian drives to a reservation gate in his automobile, gets out, opens the gate, draws it aside, gets back in his machine, drives through and in only rare instances stops to close the gate. As these gates occur at numerous and frequently isolated places it may be two or three days, possibly a week before a linerider passes that way and replaces the gate. In the meantime frequently several hundred head of cattle and horses get out and scatter for a radius of miles over their old range, now the homesteads of our white farmers.

Jermark goes on to ask what steps are being taken on other reservations to deal with such problems, particularly what can be done to make people shut gates. His closing sentence reveals his desperation: “I am in a position where I would greatly appreciate any advice or instruction which would serve to assist in abating this nuisance.”

Jermark evidently wrote to the commissioner again on 2 March 1922 and received a reply dated 22 March 1922. In this reply Commissioner Charles H. Burke suggested that there should be a minimum number of gates, which should be kept in good repair. He also suggested various plans whereby the passage of livestock through openings in the fence could be reduced:

One method is to build a fence along both sides of the roadway for a short distance at the point where the gate is located and at right angles to the boundary fence. There are several methods of constructing such lanes at gateways, but probably the most satisfactory is the one designated as the figure-eight entrance, which would appear as in the following diagram:
Another method is to construct an automobile runway alongside the gate so that the automobiles can pass without opening the gate. This is done by digging a trench and constructing two narrow runways across it just wide enough to accommodate each wheel of the automobile. A cattle guard is then constructed between the runways on the same principle as that used by the railroads or some other similar plan.

Later that year (23 October 1922) Assistant Commissioner E. B. Meritt wrote to Jermark, asking for a follow-up report, which was sent 30 October 1922:

In answer I have to advise that the line riders organized a corps of workers in their respective districts who spent a certain number of days repairing the fence in that district with the result that the reservation fence is in fairly good shape.

Good substantial gates were made and conspicuous notices posted, demanding that the gates be closed. This is an extremely difficult matter to control, as the whites, even more than the Indians, are prone to go through the gates and drive on without taking the trouble to close them. However, there has been very little difficulty experienced during the summer months.

In a handwritten postscript, Jermark noted: “To date we have not had finances, time, or help to install the auto gates.”

This correspondence prompts a couple of observations. First, the “figure eight” fence gap described by Commissioner Burke illustrates an alternate method of avoiding gates that allows for free-moving traffic. The problem, of course, is that not all livestock will be steered away by the perpendicular fence, so it is not a very effective deterrent. Second, it is interesting to note that Andrew Johnston had built his cattle guard in 1914 on the ranch road that led to his leased pastures in the Fort Berthold Indian Reservation; therefore, Jermark had an example of an effective cattle guard much nearer than the commissioner’s office.

There are dozens of other stories about cattle guards from the twenties, each interesting in its own way, but the ones given above are the most appropriate for illustrating what was happening to the cattle guard during this decade as its use spread. Sometimes this dispersal was gradual, as ranchers and farmers carried the idea from one place to another; sometimes it was rapid, as oilmen and mail carriers hastened its spread. The commercial manufacturing that began in this decade also contributed to the spread of cattle guards. The use of cattle guards has increased in each decade since this time.
This page intentionally left blank