



hen the Civil War ended in 1865, Americans had already turned their attention to the West and the Great Plains-the country's last wilderness extending west from the Missouri River to the Rocky Mountains and north from Texas to

Montana. Maps dated as late as 1860 marked the area as "The Great American Desert-Unexplored." Far from being a desert, though, the Great Plains was a sea of grasses, which Frederick Law Olmsted-famed landscape architect of New York City's Central Park-called "a broad prairie, reaching, in swells like the ocean after a great storm, to the horizon before us."

To encourage settlement of undeveloped areas, Congress turned government land over to private individuals through the Homestead Act of 1862, which granted 160 acres to each citizen who improved and farmed the land for five years. Many enterprising men and women, eager to build new lives, scrambled into the Plains. But

they soon encountered an obstacle, one that persuaded many to spurn their newly acquired land.

There was plenty of grass, but where were the forests and rocks, the fencing material requisite for farming?

They tried fencing with Osage orange hedges, which were "horse high, bull strong, and hog tight." Although hedges prevented animals from demolishing crops, they remained only a temporary solution. Slow to grow, clumsy and inflexible, hedges harbored rodents and occupied space that could be better devoted to planting. Other settlers enclosed crops with plain wire, but smooth wire did little to defend against animals. The search for something better continued.

Keep the animals out

Joseph F. Glidden, a farmer in De Kalb, Ill., had been enduring his wife's complaints about the farm animals. Lucinda wanted them out of her garden for they invaded and trampled her vegetables. So, in 1873, when Glidden encountered Henry M. Rose's exhibit at the De Kalb County Fair, he scrutinized Rose's invention—a strip of wood with nail-like spikes meant to be attached to a plain wire fence—and devised an improvement.

Back home, Glidden modified Lucinda's coffee mill so that it twisted wire barbs into the desired shape. He looped the twisted barbs onto a wire strand and, using a grindstone, intertwined the wire strand with a second wire strand to secure the barbs. Using this method, he

made several hundred feet of the barbed wire and strung it around Lucinda's garden: the barbed-wire fence successfully repelled animals from advancing into the garden and, just as importantly, put an end to her complaints.

Although Glidden was not the inventor of barbed wire (Lucien B. Smith of Ohio received the first U.S. patent for barbed wire in 1867), his design-"The Winner"was first to reach the mass market. Recognizing that his creation held more utility than simply keeping animals out of Lucinda's garden, he applied for a patent. There were, after all, settlers throughout the West who could use his invention.

News of Glidden's fence spread. Isaac L. Ellwood, a merchant who had stood alongside Glidden at the county fair, had also tried to improve upon Rose's invention. Ellwood visited Glidden's farm and grew furious when his wife commented that Glidden's barbed wire was superior. Later, Ellwood conceded and approached Glidden about a partnership; he agreed to sell 50 percent of his interest in "The Winner" to Ellwood. They formed the Barb Fence Co.—the world's first manufacturer of barbed wire—and in 1874, their first year of production, hand-produced 10,000 pounds.

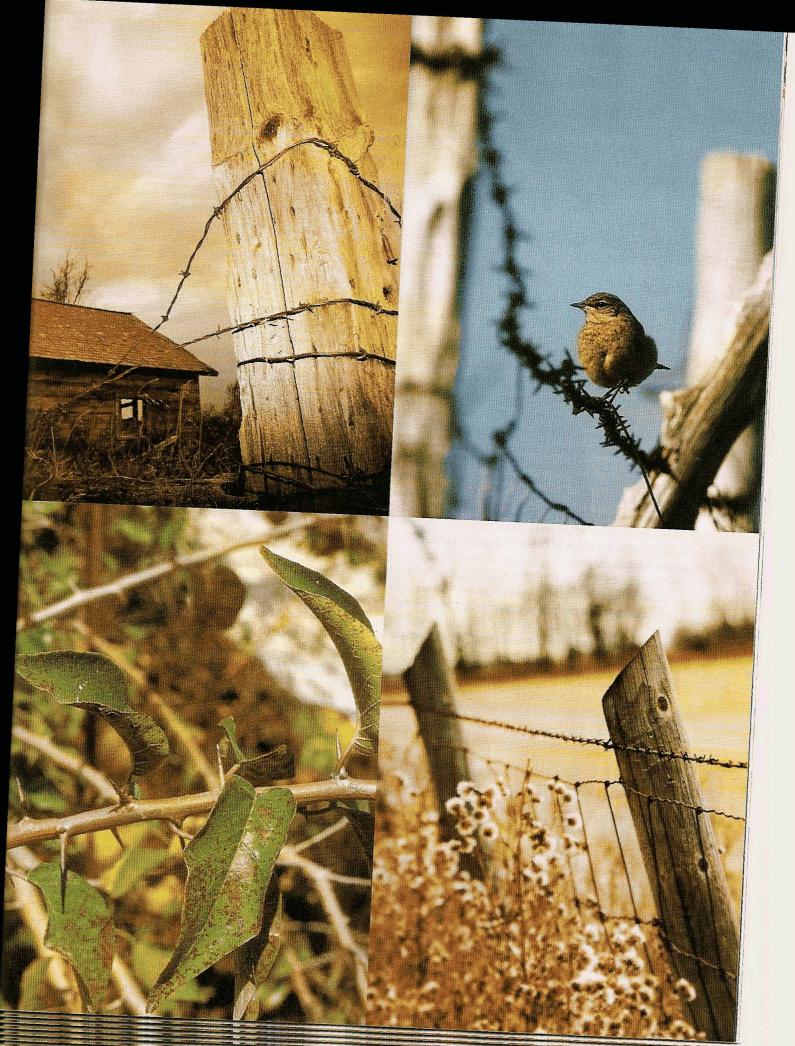
In 1876 barbed-wire manufacturers produced less than 3 million pounds; by 1879 they were making more than 50 million pounds.

In 1876 Glidden sold his interest to Washburn & Moen Co., the country's largest wire manufacturer. With new capital backing, they were equipped for mass production. Demand for barbed wire increased, with production rising from less than 3 million pounds in 1876 to more than 50 million in 1879.

With the invention and production of barbed wire, it seemed that all obstacles to westward expansion had been eliminated. Ellwood dispatched salesmen Henry Sanborn and. later. John Warne "Bet-a-Million" Gates to Texas to introduce barbed wire to cattlemen and farmers. But they were greeted with laughter and suspicion. How could this light-weight wire hold back wild Texas Longhorns? Although Sanborn failed to capture support, Gates succeeded with some creativity. As the story goes, Gates built a barbed-wire corral in San Antonio's Military Plaza which he described as "Light as air. Stronger than whiskey. Cheaper than dirt." The spectacle drew a large audience, and Gates took bets on whether it could restrain an agitated herd of cattle. After successfully demonstrating barbed wire's effectiveness and winning the bets, Gates started selling barbed wire by the railcar load.

Even after settlers acknowledged its effectiveness,

Before the invention of barbed wire in 1867, Osage orange hedges (opposite, bottom left) prevented animals from destroying crops.



barbed wire still faced large-scale resistance for it advocated indecorous behavior. The unwritten Law of the Open Range dominated the way of life in the West: Long before farmers wandered westward, cattlemen wandered the Plains and essentially lived outdoors and rarely received mail more than three times a year; they considered the range theirs. On the open range, they had access to plenty of grass and free water. They set up headquarters along the banks of streams and rivers, land which they had no legal right to occupy. A single cattleman could own 10,000 head of cattle but not one square foot of land. And though the range might be owned by the government, the cattleman's neighbors recognized his range rights. The idea of fencing pastures was an abomination: Barbed-wire fences slashed and left scars that marred and destroyed the cattlemen's livelihood. Cattlemen and their neighbors scorned settlers who inflicted such blemishes on their prairies with outright hostility, calling them "grangers" and "nesters."

Besides interfering with freedom of movement, barbedwire fences eliminated livelihoods. Cowboys and line riders, who patrolled boundaries and redirected stray cattle, were needed in diminishing numbers. And for saddle tramps undergoing 500- to 1,000-mile cattle drives to market, barbed wire impeded the path.

Many protested barbed wire—an unnatural and cruel creation—on humane grounds. This "devil's rope" inflicted severe injuries to cattle, which often died from screwworm infestation (screwworm flies lay eggs in open wounds).

At first, cattlemen filed land-use petitions in attempts to preserve open range rights. They especially protested the actions of men who gained control of land by fencing up what they didn't own. In Texas more than 100,000 square

miles were fenced illegally. But petitions brought little relief, so cattlemen took matters into their own hands. They joined forces and cut up barbed-wire fences. Fence wars broke out in 1881 in Texas and quickly spread north to Montana, soon spiraling out of control when rustlers and thieves also started cutting up fences put up by men who held valid property rights.

The trouble threatened economic stability in the West, and especially in Texas where property tax valuations fell by as much as \$30 million, causing banks to refuse loans to property owners. Fence cutters were difficult to catch and even when they were, juries refused to indict or convict them because they sided with the culprits. Settlers fled as shootings, death threats, and murders endangered the domestic security in major parts of Texas.

Texas Gov. John Ireland called a special legislative session in 1884. The Legislature considered allowing shooting and killing anyone caught cutting fences redhanded. In the end, it made fence cutting a felony, punishable by up to five years in prison, and called on the Texas Rangers to police the range. Fence wars gradually subsided and by the late 1880s, land that once sold for several cents an acre had increased in value by more than 100 percent.

Keep the animals in

Barbed-wire fence began as a way to keep out cattle. Yet when large ranches, such as the Frying Pan Ranch and the XIT Ranch in the Texas Panhandle, began fencing to keep cattle in, the last of the opposition fell. The Frying Pan, established by Glidden and Sanborn, had 150 miles of barbed-wire fence containing 1,500 head of cattle. At nearly 3 million acres and 1,500 miles of barbed-wire fence, the XIT covered 10 counties and became, in the

THE 'LANGUAGE' OF BARBED WIRE

Today, barbed wire is a reminder of the Old West and entrepreneurial ingenuity, but its uses and meanings extend beyond such romantic notions. From its first military use in 1898 in the Spanish-American War to no man's land in World War I, Nazi concentration camps of World War II, and modern-day use in prisons and along international borders, barbed wire

> evokes connotations of oppression and human suffering. Amnesty International's logo-a candle wrapped in barbed wire-communicates the organization's dedication to shining light on hidden abuses. The POW/MIA flag featuring a silhouette of a prisoner of war with a strand of barbed wire symbolizes the ruthlessness of imprisonment.

In popular culture, barbed wire appears in cartoons and advertisements. Barbed-wire tattoos, which grew out of prison culture—especially in Russia where a barbed-wire tattoo across an inmate's forehead was code for life without parole—became popular among California's Latino culture and then spread elsewhere, often appearing as arm-band tattoos such as the one worn by celebrity Pamela Anderson.

Barbed wire's political use also creates physical, emotional, and social barriers. The Arizonabased Minuteman Civil Defense Corps, through the building of the Minutemen Border Fence between the United States and Mexico, uses barbed wire to protect from "illegal invasion by aliens and international criminal cartels." Its use reinforces barbed wire's symbol of confine-

ment and exclusion, which elicits strong reactions from observers on both sides of the fence.-!



Fence wars broke out in the South in 1881, moving north soon after and spiraling out of control as rustlers (above) and thieves began cutting up fences.

1880s, the largest range in the world under fence. These ranches proved that barbed wire could be used to keep cattle in, not just out.

Cattlemen, finally convinced of barbed wire's utility, became ranchmen and began buying property. Barbed wire removed the need for cattle drives, reducing disease among cattle and limiting Indian raids. It also allowed ranchers to make efficient use of grass by moving cattle to avoid overgrazing. Cattle could be fattened, while farmers no longer suffered crop destruction from trampling.

Firmly established as an instrument of sustenance, barbed-wire fences enabled breeders to raise purebred herds. Each successive generation of cattle resulted in improved range stock, which resulted in higher prices in the market. As the price of barbed wire decreased-from 20 cents a pound in 1874 to 2 cents in 1893—cattle breeders could demand larger profits.

Barbed-wire fences also allowed railroads to advance across the Plains. Many states, such as Kansas, required railroad companies to construct fences along their rightsof-way to prevent injury to livestock. The cost of enclosing rights-of-way was enormous, but barbed wire made it economical to comply with legal requirements.

Although barbed wire extinguished the Open Range and the life that went with it, reminders of barbed wire's influence on the settlement of the Old West live on through the existence of the Barbed Wire Capital of the

World, the Antique Barbed Wire Society, the Barbed Wire Hall of Fame, and others. More than 530 patented barbed wires and more than 2,000 patented barbed-wire tools are displayed in places such as the Kansas Barbed Wire Museum in La Crosse, Kan.; the Ellwood House Museum in De Kalb, Ill.; and the Devil's Rope Museum in McLean, Texas.

Today, barbed wire is mainly manufactured offshore, but several American companies, such as Illinois-based Keystone Steel & Wire Co., remain in operation. With 1,000-plus employees, Keystone is the largest domestic producer of agricultural fencing.

When American poet Robert Frost wrote, "Good fences make good neighbors," he probably wasn't thinking of the barbed-wire variety. When first introduced, barbed wire

caused great consternation and bitter dispute, requiring a rebirth in the way of life in the Old West. Today, anyone taking a trip through America's prairie lands and western states will notice the proliferation of barbed-wire fences: They wrap around property lines, stretch along the edge of crops, and crisscross networks of pastures. Whether to keep in or keep out, barbed wire remains a testament to its life-changing influence by carrying out its assigned duties with utmost force.

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history.com/tdih to explore the

events of the Old West.