Donation of the Month

Object: Barbed Wire Samples Catalog #: 1975.259.1.11, .1, .29, .18, .2, .3, .8, .15 Donor: Mr. & Mrs. Ralph Halderman



"Oh, the farmer and the cowman should be friends." Or so sang the protagonists in the Rodgers & Hammerstein musical "Oklahoma." Why were these two groups at odds? Barbed wire. By the late 19th century farmers had moved into the western territories in ever-increasing numbers, settling into areas that were the domain of roving cattlemen and their grazing herds. Back east farms were protected by stone walls or wooden rails, but with vast expanses of open prairie to guard, these traditional forms of fencing were costly and labor intensive. Needing to protect their crops from wandering cattle, farmers wanted an efficient, economical way to keep animals at bay.

With the Industrial Revolution came the science and technology necessary to effectively manufacture long coils of strong, durable wire, a material suitable for fencing. In 1853 a Texan by the name of W.H. Meriwether patented a wire fencing made up of a single smooth wire. The advantages of Meriwether's wire as opposed to other contemporary wires was that it was manufactured in such a way as to withstand temperature extremes without becoming brittle and breaking. But although it could handle the weather, it couldn't handle charging animals. Some form of barbing was needed to deter cattle from breaking through.

A few barbed wire patents were issued following Meriwether's invention, but none of the wires appeared

to have been made in large quantities until 1868, when New Yorker Michael Kelly marketed barbed pet fencing. Another form of barbed fencing made its debut in 1873 on the edge of the prairie, at a county fair held in Dekalb, Illinois. It was there that inventor Henry M. Rose demonstrated his newly patented system consisting of a wooden rail stuck with metal spikes which was held against a wire fence.

At the fair Rose's fencing was seen by three individuals who decided to improve upon it. Both Joseph F. Glidden and Jacob Haish each developed and patented their own barbed wire at about the same time. Using a coffee mill to make the barbs and a grindstone to twist one long wire strand over another to hold the barbs in place, Glidden produced enough wire to enclose his wife's vegetable garden, an achievement that came to the attention of the wife of the third man at the fair, Isaac Ellwood. Whereas Haish never really marketed his product, Glidden joined with Ellwood to form the Barb Fence Company. In 1874 they made about 10,000 pounds of wire, mostly by hand; a year later, with a new factory filled with steam-operated machinery, production soared to 600,000 pounds.

Angry over losing the credit of being known as the inventor of barbed wire, Haish sued Glidden for patent infringement, claiming he had patented barbed wire several months before Glidden. A lengthy legal battle ensued with the U.S. Supreme Court declaring Glidden the winner in 1892 because he had filed his patent some months earlier than Haish, even though Glidden's patent application had been initially denied. In the end, Glidden's original barbed wire design came to be known as "The Winner" and Glidden himself was called the "Father of Barbed Wire," long after he had sold his patent rights in 1876.

It would seem like the use of barbed wire was a sure thing, but farmers had to be convinced of its sturdiness. Ellwood hired enterprising salesman John Warne "Bet-a-Million" Gates who came up with a surefire way to sell the product touted as being "light as air, cheap as dirt, and as strong as good whiskey." In 1875 he set up a barbed-wire corral in San Antonio, Texas, and advertised its ability to hold the meanest longhorns folks could find. All night long the 75 steers penned in the corral were hounded by galloping riders who shot guns and waved flaming torches. By the morning the cattle were still penned in, leaving Gates to make his money twice over — once for all the bets he took against the corral's failure and once for the railcar-load of wire he sold to his former doubters.

The railroads took notice too. In 1876 the Missouri, Kansas & Texas Railroad paid out \$25,000 in claims for the deaths of 1,948 cattle that had unwittingly strayed onto the tracks. To prevent any future claims from outraged farmers and ranchers, the railroads began fencing their right-of-ways.

The success of Gates' demonstration compelled others to design and market their own barbed wire, modifying such variables as the shape of the barbs or the type of wire strand or ribbon to which the barbs were attached. Some patterns were made for a specific purpose. As enterprising farmers made off with lengths of barbed wire from railroad right-of-ways, distinctive patterns were developed to help identify railroad property. Some patterns were advertised as being more humane than others, incorporating chunks of wood or large metal plates as a way to visibly warn cattle that a barrier was in place before they felt the sting of the barb. But this type of "obvious fencing" was expensive to produce and fell out of favor in the mid-1880s.

Because it was easy to manufacture barbed wire many small companies did so, whether or not they had the rights to make a particular pattern. Often they varied the design a bit to stave off patent infringement suits, but by the end of the 19th century such suits filled the courts as inventors tried to assert their rights and recoup royalties. For a time "Bet-a-Million" Gates set up his wire-manufacturing equipment on one side or the other of the Mississippi River at St. Louis to keep one step ahead of the law. His showmanship and free-market opportunism stood him in good stead; in the end he was the largest stockholder in the American Steele and Wire Company, a company formed by Ellwood in 1898 and which achieved a near monopoly of barbed wire nationwide.

But barbed wire had its detractors. Free-range grazers hated it because it impeded the movement of their cattle. Cattle drovers hated it because they feared it was being used to keep their herds from being driven to market, forcing them to ship their animals by rail. Religious groups hated it for the injuries it caused to

livestock; nicknaming it "the Devil's rope," they called for its removal. As tempers grew "fence-cutter wars" raged across the plains, causing property damage and provoking murders. It wasn't until Texas ranchers began to fence in their vast spreads to protect their boundaries and control grazing that the opposition to barbed wire faded.

All in all 756 barbed wire patents were issued between 1868 and 1900 with countless variations on patented designs. Historians estimate that less than 50% of the patented barbed wire patterns were actually made in any quantity because of manufacturing difficulties and prohibitive production costs. Even with the many patterns available, less than 10% of patented wires were actually useful.

The first barbed wire organizations began in the mid-1960s, as folks who recognized barbed wire's important role in shaping the west began collecting and cataloging examples; to date over 2,000 variations have been identified. Mr. & Mrs. Ralph Halderman were two such collectors. In 1975 they donated 30 "sticks" — 18-inch lengths of barbed wire cut to show the spacing between the barbs — to the Rogers Historical Museum. Beginning at the top of the photo and moving down are examples of such patterns as: Spur Rowell (patented 1887), Stubbe Plate (patented 1883), Crandalls Zig Zag Champion (patented 1879), Decker Spread (patented 1884), "design unknown", Crandalls Telegraph Splice (patented 1881), Three Strand Small Barb, and Brinkerhoff with Staple (patented 1881).

Of the thousands of barbed wire variations that once roamed the plains only a few patterns are still produced. They're derived from the 19th-century patents of such barbed wire pioneers as Joseph Glidden.

CREDITS

C.W. "Smokey" Doyle's article, "Barbed Wire: Trophy of Westward Expansion" in "The Encyclopedia of Collectables: Advertising Giveaways to Baskets" (1978); the article "The History of Barbed Wire" on the Kansas Barbed Wire Museum website (www.rushcounty.org/BarbedWireMuseum); the article "The History of Barbed Wire" on the Ellwood House and Museum website (www.ellwoodhouse.org); the article "A Brief History of the Invention & Development of Barbed Wire" (1999) and Delbert Trew's article "The Making of Wire" (2000) on the Devil's Rope Museum website (www.barbwiremuseum.com); and the articles "Educational Overview," "Historical Bytes," and "In the Beginning...." on the Antique Barbed Wire Society website (www.antiquebarbedwiresociety.com).