

Tips for Building a Wire Gate

Building a wire gate is economical; just make sure to keep the wires from tangling when opening.

Story & photos by **Troy Smith**



► This homemade latch is made from a piece of cast-off steel square tubing, a short length of chain and some smooth wire. Just to the left of the handle, hanging from the wire gate's top strand, is a double-loop of tie wire to slip over the end of the latch handle when it's pulled tight.

It's sometimes referred to as a fence gap, a Western gate or Texas gate. Whatever you want to call it, a wire gate is economical. And anyone capable of building barbed-wire pasture fence can fashion a gate, using the same basic materials and the same tools. It might not be as pretty as a store-bought gate made from brightly painted steel tubing, but it's functional. And some folks think a well-built wire gate is aesthetically pleasing, too, in a rustic sort of way.

A definite advantage of the wire gate is that it can be made to fit just about any size opening, without taking any measurements. If it suffers any damage, it can be mended on the spot, without a welder. And did we mention this kind of gate is really economical?

Let's assume we desire a gate that will span an opening in a fenceline — a gap between two brace assemblies. Suggested materials include barbed wire, 9-gauge smooth wire and two posts. The posts need only be 4½ to 5 feet (ft.) long, so here's an opportunity to recycle a couple of broken fence posts. Using fairly skinny posts — perhaps 3 inches (in.) in diameter — will make the finished gate easier to handle. And just for the sake of clarity, let's refer to these posts as "gate sticks."

Loops of 9-gauge wire can be used to loosely attach a gate stick to a brace post on either side of the opening in the fenceline. Note in the photograph (on left) how bottom wire loops are placed a few inches above ground level, and the top loops are placed slightly lower than the height of the gate sticks. Now, four or more strands of barbed wire can be stretched from one gate stick to the other. Note that the top strand of barbed wire must be attached to the gate sticks below the top loops fastening gate stick to brace post. The bottom strand must be attached above the lower loops.

The gate is opened by slipping a loop off the top of one gate stick, lifting it free of the lower loop and swinging the wire gate away from the opening. The other gate stick acts as a sort of hinge. Wire gates can be built without this second gate stick, by attaching each strand of gate wire directly to the brace post on that end of the gate opening. However, frequent use of the gate will result in repeated bending, back and forth, of those wires and increased incidence of breakage where the wires are attached directly to the brace post. Using a second gate stick, which pivots within the wire loops, prevents the repeated bending of wire and typically results in lower maintenance.

Stays keep wire from tangling

Now, when the gate is opened and slack is put into the wires, they are likely to tangle. To



►**Above:** These three gate latches operate on the same principle. At the top is a commercially manufactured model. In the center is a homemade version, made by someone handy with a welder, using a horseshoe, a chunk of harness tug chain and scrap pieces of steel. At the bottom is the poor man's latch, with the chain fastened to what is left of a broken pitchfork handle.

►**Below:** The same gate as shown in the first photo, this view shows the latch secured with a double loop of wire.



avoid that problem and hold wires at desired spacing, stays can be placed in the wire gate at intervals of 2 to 3 ft. Stays made from heavy twisted galvanized wire are commercially available, or the gate builder can make stays from barbed wire.

Sometimes, the end of a single strand of barbed wire, about 4 ft. in length, is wrapped around the top gate wire, then the second, third and so forth, so that desired spacing between wires is maintained. That's the quick method, but producers often find their wire gates still can become tangled when opened, because stays made from a single length of wire bend easily.

Another popular method of making a barbed-wire stay involves two lengths of wire. The end of each 4-ft. (approximate) piece is fastened to the top wire of the gate, side-by-side and about an inch apart. Then the two pieces are twisted together before they are wrapped, separately, around the second strand of wire in the gate. They are twisted together again, wrapped around the third wire in the gate, twisted together and wrapped around the fourth wire. This method results in a bit heavier stay that's stiff enough to resist bending. If, after using doubled and twisted stays, the wire gate still seems to get all tangled up, try using additional stays.

Fasten securely

It's also a good idea to make sure all gate wires are fastened securely to the gate sticks. Commonly, staples are used to secure wires to the gate stick at their proper spacing. Otherwise, the wires may slide up or down the gate stick when the gate is opened and wire is slack.

An often-heard complaint about wire gates is that they are difficult to open. And, after getting it open, a nice, tight wire gate may be even harder to close. For that reason, some gate builders use a longer gate stick for

the latching end of their gates. If the gate stick is more than 5 ft. tall, a person can put their shoulder against it and push to get the slack needed to remove or replace the wire loop serving as gate latch.

And some people employ a "cheater." That may be a stick or piece of pipe fastened to the brace post, by a length of chain or wire, which can be used to "lever" the gate stick close enough to remove or replace the loop latch. Better yet is a device that serves as cheater and gate latch combined. Several types of wire gate latches are available commercially, but homemade versions can be fashioned from pipe, square tubing or the broken handle of a shovel or pitchfork.

Splicing wire

We've talked about choosing fencing materials for traditional barbed-wire fences, constructing braces and gates, and shared a few tips for making new fence. However, most producers spend far more time mending existing fences. And perhaps the most basic of tasks involved is splicing wire. Three splicing techniques are used all across cow country, each having its advantages and disadvantages.

Perhaps most commonly used to join two ends of wire is what many people call a "double loop" splice. That involves bending the end of one wire into a loop and wrapping the end back around the wire itself. Then, the end of the second wire is passed through the loop made in the first wire, bent around and wrapped around itself. This splice is fairly quick to apply, but anytime wire is subjected to a sharp bend (which happens when the loops pull down tight), it puts a chink in its zinc armor (galvanizing). Rusting begins and, eventually, the wire is likely to break at that point.

Another method of joining the ends of two wires is the Western Union or telegraph splice. To begin this splice, a bend of 90 degrees is placed several inches from the end of each of the wires to be joined. The wires are then "hooked" together at the angles created, and the end of each wire is wrapped tightly around the other wire. Advocates say, when it is done properly, this splice is stronger and does not create the sharp bends that promote rust and eventual breakage.

Gaining increased use are splicing devices marketed commercially under several different brand names. The ends of the wires to be joined are passed through small steel ferrules or sleeves, from opposite directions. A crimping tool is then used to crimp the sleeve so the wires cannot pull out. It's also recommended that the very tips of each wire, which protrude from opposite ends of the sleeve, be bent slightly outward as an additional measure against slippage. This splicing method is more expensive, but it can be particularly advantageous when splicing old wire that won't stand much manhandling. With this splicing technique, it might last another year or so.

Of course, splices are necessary when constructing new fence, to join one roll of new wire to another. The double-loop splice may be used most often, but the "experts" we've consulted suggest the telegraph splice as the strongest, most long-lasting splice.

