E. E. MYERS.
WIRE FENCE STAY.

Patented Feb. 12, 1895. No. 534,169. Fig.1. Fig. 5. Edwin E. Myers, Witnesses: Leo Exech. Sollamer Hoo., Attorneys,

UNITED STATES PATENT OFFICE.

EDWIN E. MYERS, OF PAINTER CREEK, OHIO.

WIRE-FENCE STAY.

SPECIFICATION forming part of Letters Patent No. 534,169, dated February 12, 1895.

Application filed November 7, 1894. Serial No. 528.140. (No model.)

To all whom it may concern:

Be it known that I, EDWIN E. MYERS, a citizen of the United States, and a resident of Painter Creek, Darke county, State of Ohio, have invented certain new and useful Improvements in Stay-Fasteners; and I declare that my preferred manner of carrying out the invention is set forth in the following full, clear, and exact description, terminating with claims particularly specifying the novelty.

This invention relates to wire fences and the stays connecting the stringer wires thereof, and more especially to the means employed for fastening said stays to the stringers; and the object of the same is to produce an improved stay fastener of several forms, which use a key or keys whereby the stay is detachably connected with the stringer.

To this end the invention consists in a stay 20 fastener constructed substantially as hereinafter described and claimed, and as illustrated in the accompanying drawings, wherein—

Figure 1 is an elevation of a panel of my fence, showing how the stays can be applied 25 to the stringers in sections so as to break joint with each other and add to the beauty of the fence without detracting from its strength. Fig. 2 is an enlarged sectional view showing the manner of connecting the stay with the 30 stringer wire by the use of two sections of binder wire and a key. Fig. 3 is a similar view of a fastening involving the use of but one section of binder wire and a key. Fig. 4 is a similar view also using but one section 35 of binder wire and showing the stay with but a single hole for the passage thereof. Fig. 5 is an elevation of a stay having fastenings similar to that shown in Fig. 4, and illustrating how one key may be employed to lock all 40 the binder wires.

In all of said views, the letter F designates the fence wire erstringer, which may be plain or barbed or which could be a band or ribbon wire with or without barbs and twisted or not as desired.

S is a stay which is an upright member of wood or metal, curved, angular, or flat in shape, of any suitable size and cross section, but preferably large enough to be visible at some distance, and which may extend for the entire height of the fence or be made in sections as shown in Fig. 1, in which instance

the sections should break joint or lap each other so as to properly connect the stringer wires; and B is the binder wire connecting 55 the stay with the stringer, with or without the use of the key K.

In Fig. 2 the stay has two holes H2 through its body and the binder has twists T² around the stringer at the edges of the stay and open 60 coils t^2 next inside the twists and at the inner ends of the coils the binder passes through the two holes H² and forms two entirely independent loops or hooks C2, the ends being returned into the holes for a sufficient distance to pre- 65 vent their pulling out. It will be seen that the binder wire is here in two pieces or sections and a key K is employed, standing against the rear face of the stay, and passing through the extremities of the loops or hooks as shown. 70 To disconnect this fastening it is simply necessary to remove the key, when the stay can be withdrawn from the fence and the loops C² will slip out the holes—the binder wire in this instance, however, remaining on the 75 stringer.

In Fig. 3 I have shown how the binder wire might be made in a single piece or section by extending the loops or hooks C3 across behind the stay as at c^3 and inserting the key as just 80 above described. In this instance, however, the key simply gives strength to the parts and its removal would not permit the disconnection of the stay from the stringer without first cutting the binder at its center and turn- 85 ing the ends down into the holes as seen in Fig. 2. In many instances it may be advisable to build a fence originally in this manner and even to omit the key entirely at first; and if at any time it becomes necessary 90 to remove the stay, the binder wire is cut at the point c^3 into two sections when the stay can be readily removed without uncoiling the twists T³. When the stay is again applied, the two sections C³ of the binder are passed 95 through the holes H³ and formed into hooks or loops as shown at C² in Fig. 2, and the key K can then be inserted as illustrated in that

After a fence is first built it may be five 100 years before it is desired to remove the stay in question, and during all that time it will be firmly held by the construction of fastening illustrated in Fig. 3, while after that time

it will be removably held by the construction

shown in Fig. 2.

In Fig. 4 the stay is provided with but a single hole H4 opposite each stringer, and the 5 binder wire has but a single loop C4 at its center passing out through this hole and receiving the key. This is an extremely simple construction of my device, as it necessitates the boring of only a single hole for each to fastening and the ends of the loop cannot possibly pull out as they might do in Fig. 2 if the binder were of too small a wire. The twists T⁴ here shown as opposite the edges of the stay could, in fact, be located at t^4 as 15 shown in dotted lines without departing from the spirit of the invention, and the result would be that less binder wire would be used and there would be less likelihood of the

parts getting out of position. In Fig. 5 is shown the construction of binder wire illustrated in Fig. 4, except that in this case a single key K⁵ extends vertically against the rear face of the stay and passes through the loops C⁵ of the several binders; and the 25 key may have a head k^5 resting upon the upper binder as indicated in dotted lines to positively prevent its dropping out of the loops, although I believe the tension of the wires will usually effect this end. This form of fas-30 tening is useful where a stay is to be bodily removed from the entire fence, rather than where it may be desired, as in the other cases, to disconnect an individual stringer from the several stays as when the stringer is loose or 35 broken or it is desired to substitute one stringer of another pattern or size. This single-key-idea could be used with the construction indicated in Fig. 2 by employing two upright keys to pass through the several aligned to hooks or loops C2, or a single key of hairpin shape (see dotted lines Fig. 5) whose legs

 k^5 shown in Fig. 5.

All parts are of the desired sizes, shapes,

would pass through the several loops and

whose bend would take the place of the bend

materials, and proportions, and the wires used are preferably galvanized or otherwise treated to prevent rusting. The binder wire and the key should, of course, be of sufficiently stiff materials to prevent their undesirably 50 straightening out or bending, and the stay is preferably a flat piece of wood or metal of sufficient width to make the fence as a whole visible to stock, so that the latter will not run against it.

The stays could even be of fanciful design with knobs or points at their upper ends so that the fence could be utilized in towns and cities, and my improved connection could be used between the fence wires and posts—all 60 without departing from the principle of my

invention.

What is claimed as new is—

1. In a wire fence, the combination with a stringer, and an upright stay standing along- 65 side the same and having a hole; of a fastener consisting of a binder wire whose extremities are coiled on the stringer and whose center has a loop projecting through said hole, and a key passing removably through the loop, as 70 and for the purpose set forth.

2. In a wire fence, the combination with a stringer, and a stay standing alongside the same and having a pair of holes through its body; of a fastener consisting of a binder wire 75 in two members, each having one extremity coiled on the stringer and the other extremity formed into a hook standing within one of said holes in the stay with its loop projecting beyond the remote face thereof, and a single 80 key removably passing through both said loops, as and for the purpose set forth.

In testimony whereof I have hereunto subscribed my signature on this the 24th day

of October, A. D. 1894.

EDWIN E. MYERS.

Witnesses:

A. H. SWINGER, H. H. BIRCLEY.