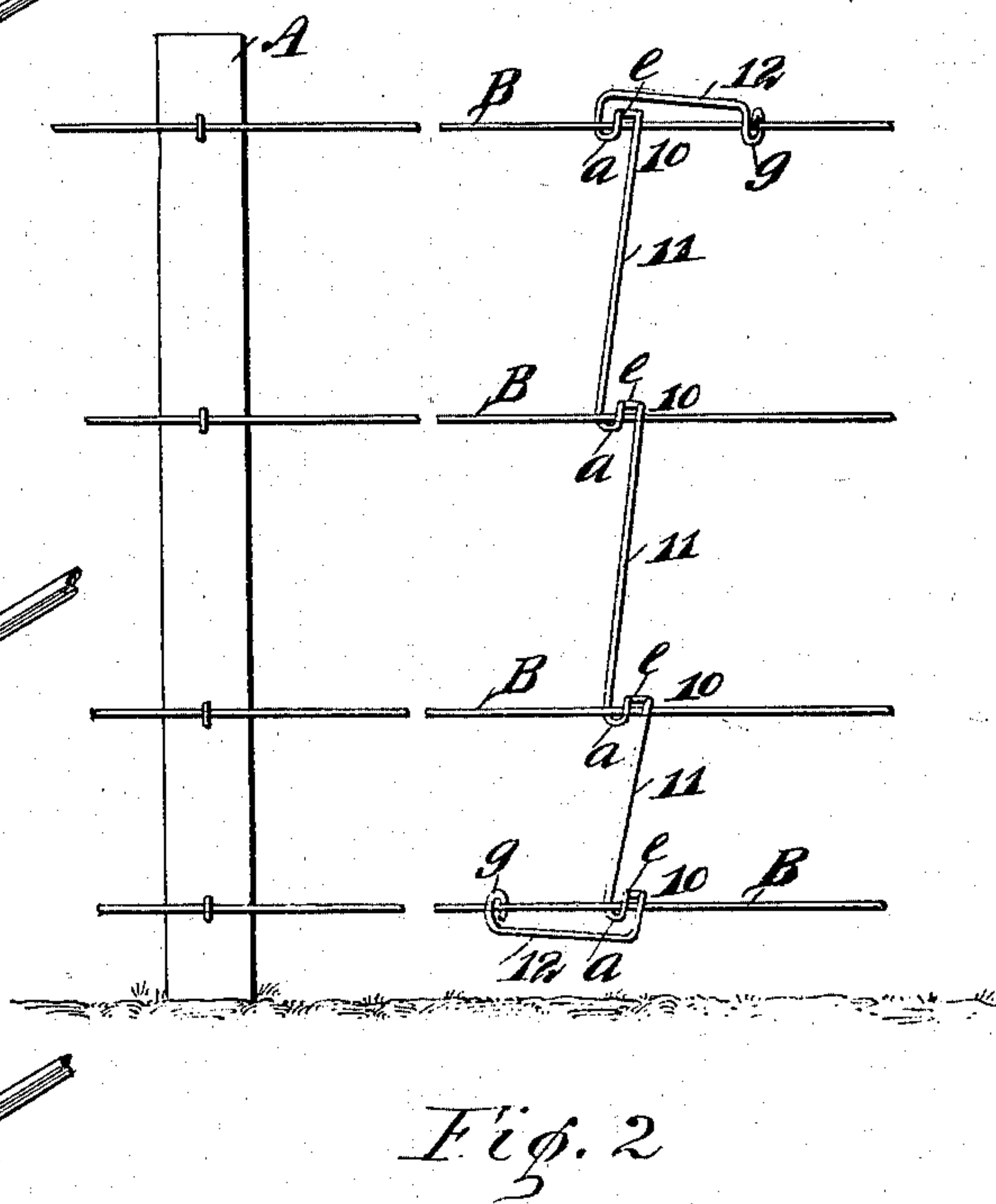
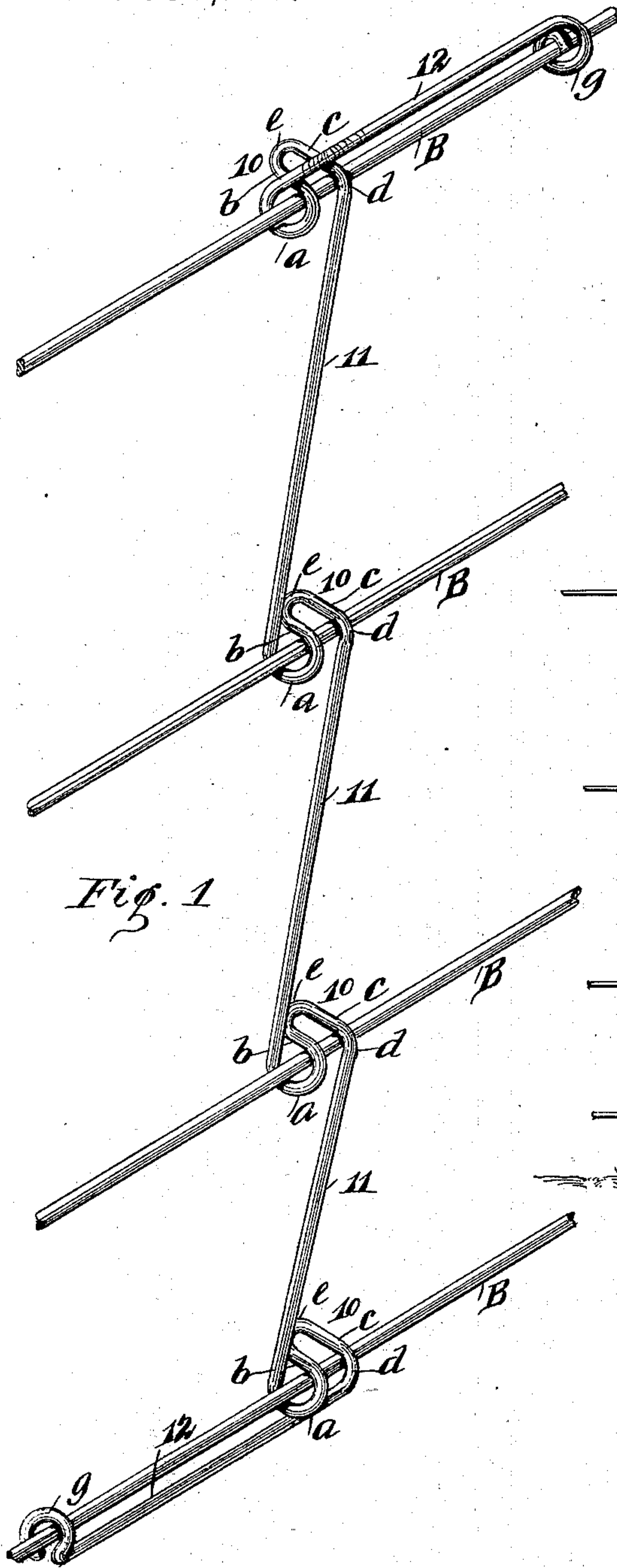


(No Model.)

A. J. SLOAN.
FENCE WIRE STAY.

No. 559,226.

Patented Apr. 28, 1896.



WITNESSES:

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ALFRED J. SLOAN, OF CLYDE, NEW YORK.

FENCE-WIRE STAY.

SPECIFICATION forming part of Letters Patent No. 559,226, dated April 28, 1896.

Application filed September 12, 1895. Serial No. 562,270. (No model.)

To all whom it may concern:

Be it known that I, ALFRED J. SLOAN, of Clyde, in the county of Wayne and State of New York, have invented a new and Improved Fence-Wire Stay, of which the following is a full, clear, and exact description.

This invention relates to an improved brace or stay for spacing apart and sustaining the wires of a fence, and has for its object to provide a fence-stay bent from a wire rod, so as to be adapted to hook fast to the fence-wires, hold them spaced, and have a locking device at each end of the stay which affords means for the detachable but secure connection of the ends of the stay with the upper and lower wires of the fence.

The invention consists in the peculiar construction of the novel fence-stay, as is hereinafter described, and indicated in the claims.

Reference is to be had to the accompanying drawings, forming a part of this specification, in which similar characters of reference indicate corresponding parts in both of the views.

Figure 1 is a perspective view of the improvement applied to the wires of a wire fence shown in part; and Fig. 2 is a side view of part of a wire fence, a supporting-post therefor, and one of the improved fence-stays in position on the fence-wires.

In the erection of barbed-wire or other wire fences it is essential that the stretches or panels of fence extending between posts of the fence be held spaced apart by suitable braces or stays, which will prevent the swaying of the wires, maintain them in parallel planes, and prevent their lateral displacement by animals that may strive to pass through between the wires.

It is of advantage to make the fence-wire stays of light strong material, so that an improper load is not imposed on the fence, and the stays of a wire fence should not present any considerable surface for pressure of wind on the same to the detriment of the fence.

The improved fence-wire stay, which will presently be described, is extremely simple, cheap to produce, light, strong, and adapted by its formation to be conveniently and securely attached to the fence-wires, and, when desired, may be quickly removed therefrom without the use of tools.

In Fig. 2 the portion of a wire fence shown consists of a post A and four fence-wires B, secured on the post, which wires are sufficient in number to indicate the application of the improvement thereto. It is to be understood, however, that in constructing a complete fence a greater number of wires are to be used and their length extended between a series of posts, whereon they are secured in spaced condition.

Preferably the fence-wires B are disposed on supporting-posts A so as to be closest together near the ground, which will afford a barrier capable of preventing the passage through the fence of fowls or small animals, this being a common method of erecting a wire fence.

The improved fence-wire stays that in use are provided in sufficient number to properly support the fence-wires B are shown singly in each view of the drawings, said stays each comprising a single wire strand bent into shape essentially as follows: At intervals of separation which correspond with the number of fence-wires B similar integral locking devices 10 are formed, leaving spacing-bars 11 between each pair of said locking devices. Each lock 10 is produced by first bending a nearly complete ring-eye *a* on the wire strand at a point where said eye will be in position to receive a fence-wire. The coil of the ring-eye is spiral, so that a portion of the material composing it will trend laterally, and by extension at the side of the adjacent depending spacing-bar 11 affords a limb *b*, which is sufficiently spaced from the bar 11 to permit the entrance of the fence-wire that is to occupy the eye *a*.

The wire strand composing the stay is return-bent to terminate the limb *b* and form a spaced limb *c* parallel thereto, and the length of the limb *c* is determined by producing a quarter-bend *d* in the wire strand, so as to project it down from the looped hook *e*, produced at the side of the ring-eye *a* by the described formation of the wire, the downward extension of material affording another spacing-bar 11.

The described construction of each adjacent ring-eye *a* and hook *e*, provided for engaging with a fence-wire, is complete for all wires

of the fence that are located between the top and lower fence-wires; but to provide means for locking the upper and lower ends of the fence-wire stay on the top and bottom wires 5 of the fence a novel spring-locking limb 12 is furnished to engage each of said fence-wires, which locking-limbs are produced substantially as follows:

The looped hook *e* is formed on the upper 10 end of the stay-bar 11, which extends between the two uppermost fence-wires B, and the eye *a* is formed nearly complete by producing a spiral coil on the limb *b* of the hook *e* that is farthest from the bar 11.

15 The upper end of the fence-stay is bent so as to provide a limb 12, which extends from the coil of the eye *a* above the hook *e*, substantially in the same vertical plane with the upper stay-bar 11 and nearly at a right angle 20 thereto.

On the extended end portion of the limb 12 a coil *g* is formed, which is sufficiently open to permit its hooked engagement with the fence-wire when the fence-stay is in position 25 on the wire fence. A locking-limb 12 is also formed on the lower end of the fence-stay, as clearly shown in Fig. 1, projecting from the bend *d* of the outer limb *c* of the stay below the partly-open ring-eye *a*, so that the coil *g* 30 on the free end of the limb 12 may be hooked over the lower fence-wire B.

In applying the improved wire stay to a fence the stay is first pressed against the wires B of the fence with the eyes *a* each be- 35 low and near the fence-wire with which it is to engage, the upper locking-limb 12 being preferably projected toward the operator and over the top fence-wire. The stay is now slid upward, which will cause the several 40 fence-wires to enter the open ring-eyes *a*, and the operator now swings the upper limb 12 to the right, so that it will lie above and parallel with the upper fence-wire. The swinging movement of the upper locking-limb 12 45 causes the lower locking-limb to lie below the lower fence-wire B, projecting in an opposite direction from the trend of the upper locking-limb. The disposition of the limb 12, as described, serves to project each looped 50 hook *e* above the adjacent fence-wire B, thereby locking said wires in the ring-eyes *a* they occupy. The coils *g* of the limbs 12 are now bent toward and interlocked with the upper and lower fence-wires B which the 55 resilience of said limbs will permit, and thus

completes the operation of attaching the fence-stay to the wires of the fence.

It will be seen that at any time it is desired to remove the fence-stays for repair of the fence or for other causes it is only nec- 60 essary to unhook the coils *g* from the fence-wires and swing the limbs 12 so they stand nearly at a right angle to the plane of said wires, which will release the hooks *e* there- 65 from and allow the fence-wires to pass out of the openings in the eyes *a*.

Having thus described my invention, I claim as new and desire to secure by Letters Patent—

1. A fence-stay formed from a wire rod and 70 provided at intervals with open ring-eyes and looped hooks, and having a spring-locking limb at each end, the said locking-limbs extending in opposite directions and each provided with a hook adapted to be held in 75 engagement with the fence-wire by the resiliency of the spring-limb, substantially as described.

2. A fence-stay, comprising a series of stay-bars, each having an incomplete ring-eye 80 formed on one end by a spiral coil, affording an opening at the top of the eye on one side of the stay-bar, said bars each having a looped hook formed at the end opposite from that having the open ring-eye thereon, the said 85 looped hooks being bent substantially at right angles to the body of the bar, and each hook having one limb integral with the coil of the adjacent ring-eye, and a securing device for each end of the fence-stay, consist- 90 ing of a spring-limb adapted to removably interlock with the top and bottom wires of the fence, substantially as described.

3. A fence-wire stay, comprising a series of stay-bars, open ring-eyes on one end of 95 said bars, looped hooks on the other end of said bars and arranged substantially at right angles to the bars and connected by one limb of each hook with an adjacent open ring-eye and a securing device for the ends of the 100 fence-stay, each consisting of a spring-limb extended from the end of the said stay and having a hook formation on the free end thereof, said hooks being adapted to remov- 105 ably interlock with the top and lower wires of the fence, substantially as described.

ALFRED J. SLOAN.

Witnesses:

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CHARLES H. KERNS.