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G. S. BARTHOLOMEW, Dec'd.

E. A. BECK, Administrator.

WIRE FENCE.

(Application filed Nov. 28, 1898.) (No Model.) Big.2. From S. Bartholowew By Townsend 18 non his attys.

UNITED STATES PATENT OFFICE.

GROVE S. BARTHOLOMEW, OF LOS ANGELES, CALIFORNIA; E. A. BECK ADMINISTRATOR OF SAID BARTHOLOMEW, DECEASED.

WIRE FENCE.

SPECIFICATION forming part of Letters Patent No. 676,023, dated June 11, 1901.

Application filed November 28, 1898. Serial No. 697,698. (No model.)

To all whom it may concern:

Be it known that I, GROVE S. BARTHOLO-MEW, a citizen of the United States, residing at Los Angeles, in the county of Los Angeles 5 and State of California, have invented new and useful Improvements in Wire Fences, of which the following is a specification.

The object of my invention is to provide for the more ready and convenient constructo tion of wire fences and at the same time to make an extremely light, strong, and durable and plainly-visible fence.

My invention comprises the various features of construction and combinations of 15 parts hereinafter fully set forth and claimed.

The accompanying drawings illustrate my invention.

Figure 1 is a fragmental view, partly in section, showing a fence supplied with my im-20 proved stay and lock. Fig. 2 is an enlarged detail showing the stay and lock, with the the fence-wire. Fig. 3 is a like view showing the wedge interposed between the loop of the 25 lock and the stay-wire. Fig. 4 is a plan view

of Fig. 3.

In the drawings, A represents my improved stay. This stay is formed of rigid wire of any suitable size, and at its lower end it is 30 driven into a supporting and anchoring stake B, which is driven into the ground and has its top arranged below the surface of the ground. This avoids decay to a large extent, since wood at the surface of the soil decays 35 quicker than that either above or below the surface. Above the top of the stake I preferably apply a layer of cement C, which is placed in position after the stay-wire A is driven into the top of the stake. This cement 40 operates not only to hold the stake from being pulled out of the ground, but also serves to protect the top of the stake from moisture and to also firmly bed the lower end of the stay-wire. The stake serves not only to sup-45 port the stay and the weight of the fence-wires secured thereto, but also serves as an anchor to prevent the stay from being pulled upward.

D represents the horizontal fence-wire, and 50 E represents my improved lock, which is pref-

a staple or into loop shape and having its side members e each bent at its outer end to hook upon or engage with the fence-wire when the lock is arranged with its side arms em- 55 bracing the stay-wire, as shown in the drawings.

F is my improved wedge, which is provided upon one side with a concave face f, and is preferably provided upon the other side with 60 a convex face f'. When the wedge is interposed between the stay and the fence wire, as shown in Fig. 2, the concave face is ar-

ranged resting against the stay-wire, and the convex face rests against the fence-wire be- 65 tween the two hooks, which engage with the fence-wire, so that it forms a point of bearing between the two hooks, and this allows a slight spring of the fence-wire and allows for expansion and contraction by heat or cold 70

without loosening the lock.

In Fig. 3 the wedge is shown driven between wedge interposed between the stay-wire and | the end of the loop and the stay-wire, the concave face being presented next to the stay aud the convex face fitting into the bend of 75 the loop. In this case the fence-wire is brought against the round face of the staywire, which forms the bearing between the two arms of the loop and gives the spring necessary to compensate for the expansion and 80 contraction.

> By making the wedge F concave upon one face f and arranging this face next to one of the wires—the one along which the wedge extends—the wedge is thus held firmly parallel 85 with the wire against which the concave face rests, and I am thereby enabled to dispense with one of the pairs of parallel side arms which it has heretofore been necessary to use in order to hold the wedge from canting, and 90

thus becoming loosened.

In order to obtain a square pull against the fence-wire, I provide each of the side members e of the loop with an offset or bend e', thus forming the hook at the end thereof in 95 such position relative to the side members that when the hook is hooked upon the fencewire with the loop embracing the stay-wire, the axis of the stay-wire will be substantially in line with the axis of the side members of 100 the loop. Thus when the wedge is driven erably formed of wire bent into the form of I home a square pull is maintained and there

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is no liability of the parts becoming canted with relation to each other, and thus rendering them liable to become loosened by an up or down movement of the fence-wire.

In practical operation the fence-wires are first strung in position and drawn taut. Then the supporting and anchoring stake is driven into the ground at the desired place, a hole of sufficient depth being made to allow the stake 10 to be driven until its top is arranged a distance below the surface of the ground. Then the stay-wire is driven downward into the supporting-stake, and, if desired, a layer of cement is spread over the top of the stake 15 and around the stay-wire, and after the cement hardens the stake is rigidly anchored in position. Then the locks are applied, the loop being placed to embrace the stay-wire and the hooks being engaged with the fence-20 wires, after which the wedge may be driven either between the stay and the fence wires or between the stay and the end of the loop, thus firmly binding the parts in position.

In order to render the fence visible by a 25 device which is neat, cheap, and durable, I string sight-indicators G upon the wires, these indicators being preferably formed of spools or other objects suitably colored and each having a perforation therethrough, the 30 indicators being strung upon the stay-wires. They may be arranged between the top and second wires, if desired, and thereby retained in position without any other fastening.

It is obvious that the lock may be arranged 35 to embrace the fence-wire in the loop and to

hook upon the stay-wire. It is also obvious that the hook portion of the lock may be made long, and after being placed in position upon the wire bent around the wire to form an eye, as shown in dotted lines in Figs. 2 and 40 3. In such event, however, the locks cannot be easily loosened, and in order to remove the stay it must be slipped upward out of the locks, the wedges being all removed for this purpose. The concrete slab C serves not only 45 as an additional anchorage for the stay, but also serves as a protection for the top of the stake to prevent the entrance of moisture and air into the pores of the wood, and thus tending to preserve the stake.

Now, having described my invention, what I claim as new, and desire to secure by Letters Patent, is—

- 1. A fence-stay comprising a wooden anchor-stake; a wire driven into the top thereof 55 to extend to the top of the fence, and a slab of concrete around the wire and on the top of the stake and rigidly secured thereto and to the stake and extending laterally beyond the stake.
- 2. A fence-stay comprising a wooden anchor-stake; a wire driven into the top thereof and extending upward for attachment to the strands of the fence; and a slab of concrete around the wire and on the top of the stake 65 and rigidly secured thereto and to the stake.

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GROVE S. BARTHOLOMEW.

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Witnesses:

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