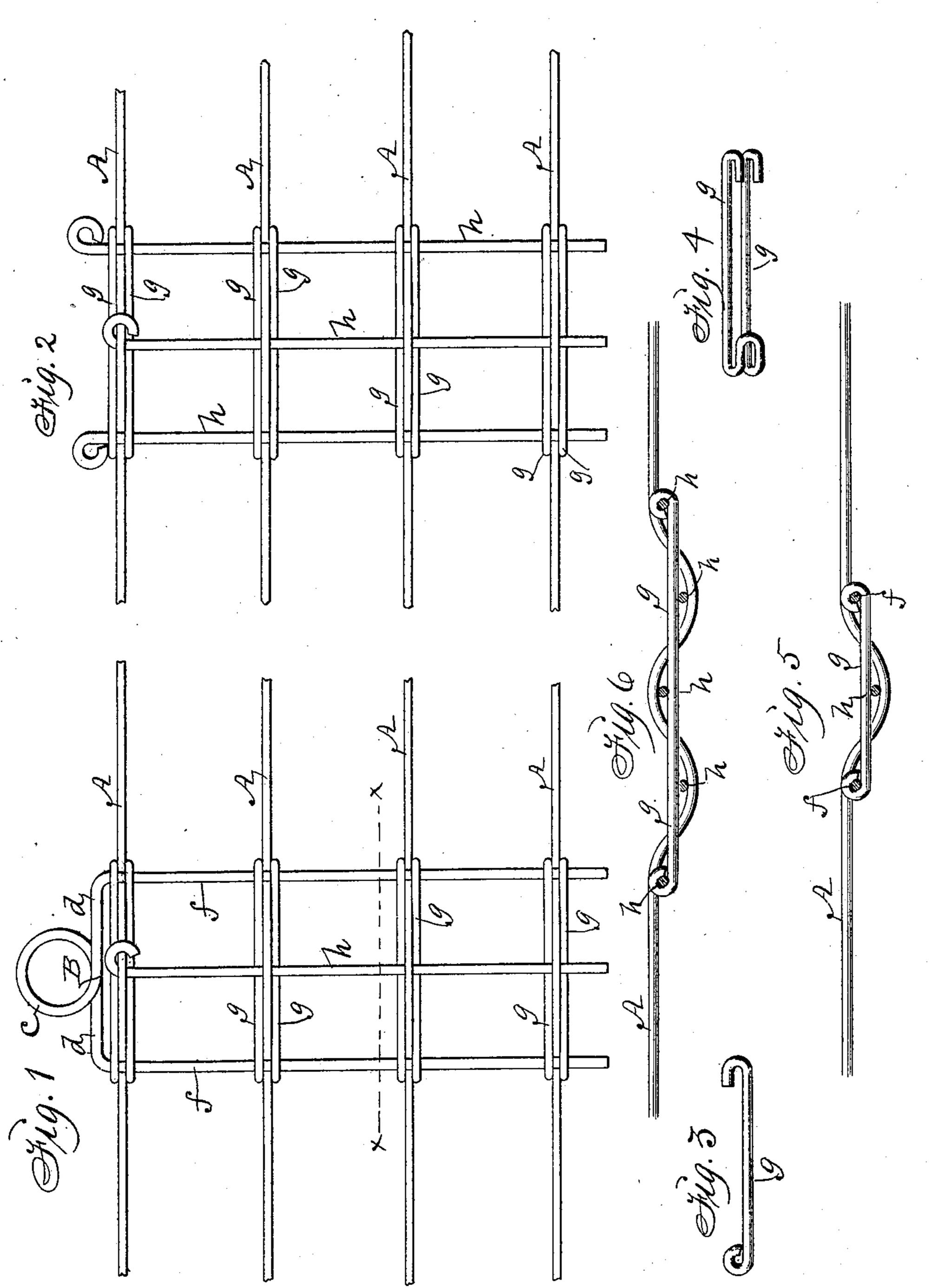
## H. KEES.

## WIRE FENCE STAY AND LOCK.

(Application filed Feb. 19, 1898.)

(No Model.)



Sas. Barels.

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# United States Patent Office.

### HARVEY KEES, OF IOWA FALLS, IOWA.

#### WIRE-FENCE STAY AND LOCK.

SPECIFICATION forming part of Letters Patent No. 611,913, dated October 4, 1898.

Application filed February 19, 1898. Serial No. 670,911. (No model.)

To all whom it may concern:

Be it known that I, Harvey Kees, a citizen of the United States, residing at Iowa Falls, in the county of Hardin and State of Iowa, have invented a new and useful Wire-Fence Stay and Lock, of which the following is a specification.

My object is to provide a simple, strong, durable, and efficient means for securely fastenio ing stays to fence-wires, as required to retain the wires in parallel horizontal position and to produce an improved wire fence.

My invention consists in the arrangement and combination of stays and locking devices with a plurality of fence-wires, as hereinafter set forth, pointed out in my claims, and illustrated in the accompanying drawings, in which—

Figure 1 shows a duplex vertical stay and 20 a single stay jointly secured to three or more fence-wires by means of two distinct locking devices extended horizontally with each one of the fence-wires. Fig. 2 is a modification of Fig. 1, showing two distinct vertical stays 25 substituted for the duplex stay. Fig. 3 shows the form of one of the locking devices made of a single short piece of wire provided with an eye at one end to admit a vertical stay and a hook at the other end to engage a ver-30 tical stay. Fig. 4 shows a duplex lock made of a single length of wire and provided with hooks at its ends to engage vertical stay-wires. Fig. 5 is a sectional view looking down from the line x x in Fig. 1. Fig. 6 is a modifica-35 tion of Fig. 5, showing five stay-wires and the fence-wire bent in reverse ways and in engagement with five stay-wires in place of only three.

The letters A designate fence-wires in par-40 allel position as required when fixed to posts

to produce a panel of fence.

B is a duplex stay made of a single length of wire bent into the form of a circle C at its center and then in reverse directions to produce mating portions d of a horizontal top and the end portions then bent downward at right angles to produce mating and parallel vertical stays f and f.

To connect the duplex stays with a plurality 50 of fence-wires A, I attach two of the single

locking devices g to one of the vertical mating parts of the duplex stay as required to produce hinged connection, and one above and one below each fence-wire, and then place the hooks on their other ends on the other 55 vertical mating member of the stay. A third vertical stay h is then used as a key and pressed down between the fence-wires A and the locking devices g and the fence-wires bent, as shown in Fig. 5, as required to clamp 60 and lock the vertical stays f, f, and h to the fence-wires in such a manner that the stays will prevent the fence-wires from sagging and retain the wires in horizontal parallel positions relative to each other.

In Fig. 2 three distinct stays are applied to the fence-wires and locked thereto in the same manner. Each one of the single stays h has a coil at its top end adapted to serve as a head to restrict its downward passage between 70 the fence-wires and the locking devices g.

It is obvious that the duplex locking device shown in Fig. 4 can be used in place of two single ones h. (Shown in Fig. 3.)

Fig. 6 shows five vertical stays in place of 75 three, as shown in Fig. 5.

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

1. In a wire fence, locking devices having 80 bent ends adapted to engage wire stays extended vertically against fence-wires, a plurality of fence-wires, two stay-wires connected with the ends of the locking devices and a third stay-wire passed between the fence-85 wires and the locking devices all arranged and combined as shown and described, for the purposes stated.

2. In a wire fence, a locking device for fastening stay-wires to a fence-wire consisting of 90 a single piece of wire having hooks on its ends and bent double at its center and its mating straight end portions into parallel position and their connected ends jointly bent into the form of a hook combined with three stay-95 wires as shown and described for the purposes stated.

3. An improved wire fence, comprising a plurality of fence-wires, two stay-wires to engage the fence-wires in crossed positions 100

therewith and parallel to each other and some space apart, locking devices having hooks on their ends connected with the stay-wires and extended horizontally in contact with the fence-wires, and a third stay-wire extended between the locking devices and the fence-wires in a central position relative to the

aforementioned two parallel stay-wires, to serve as a key, all arranged and combined as shown and described.

HARVEY KEES.

Witnesses:

C. A. SHELDON, CHAS. CUTTER.