

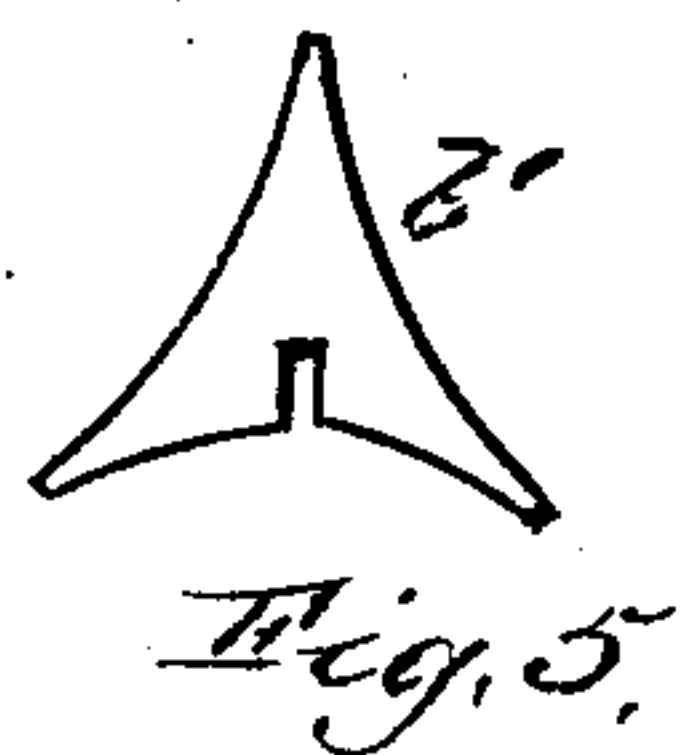
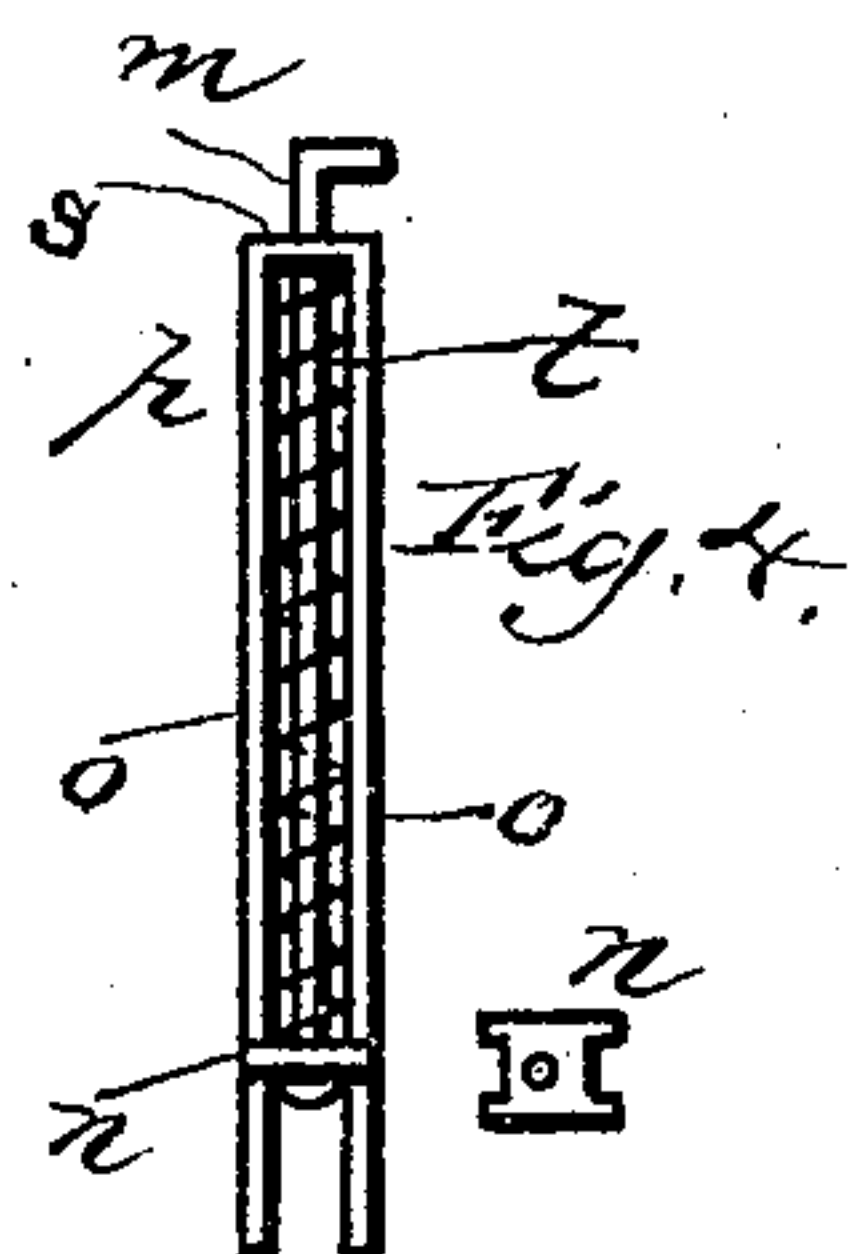
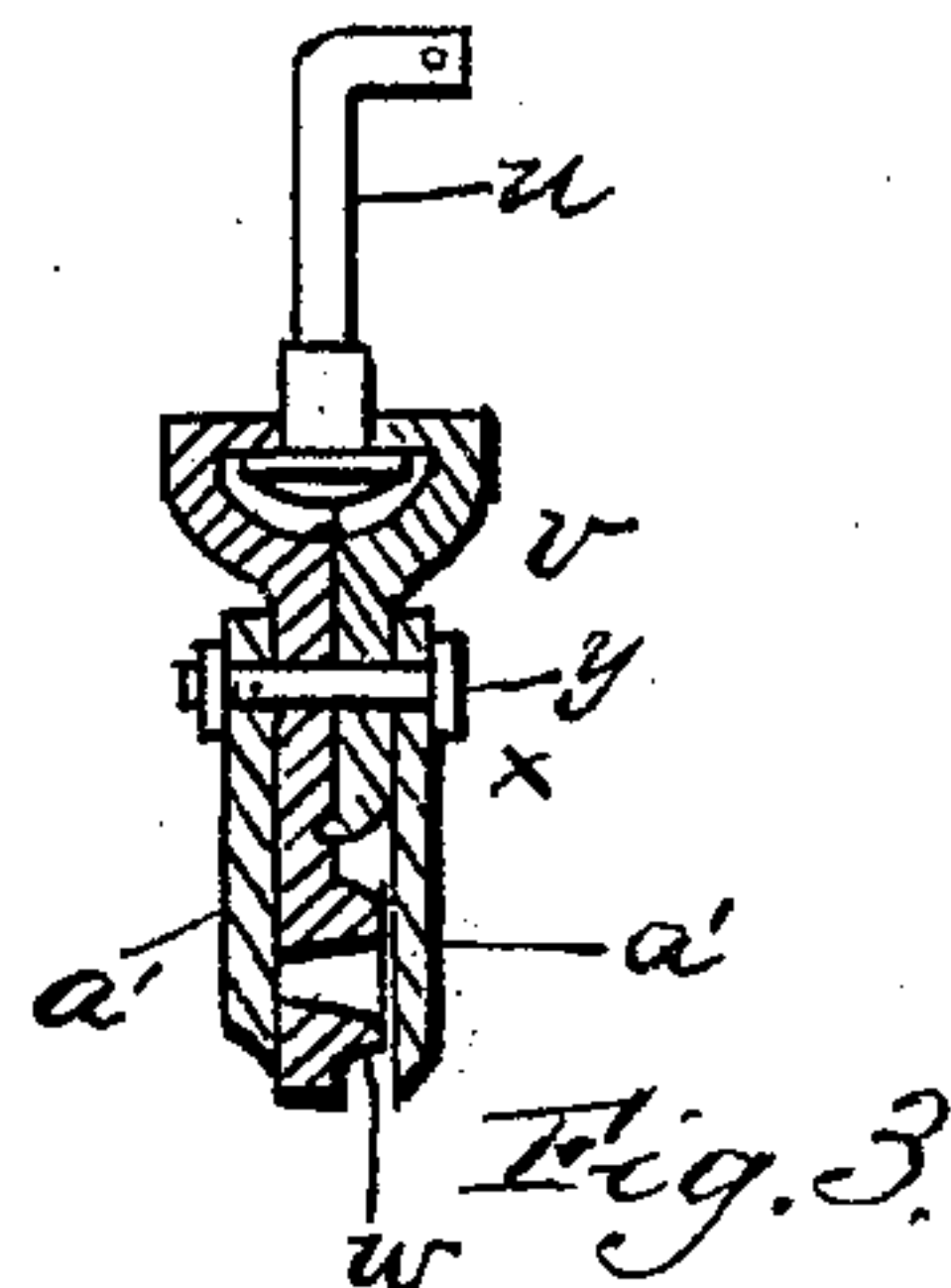
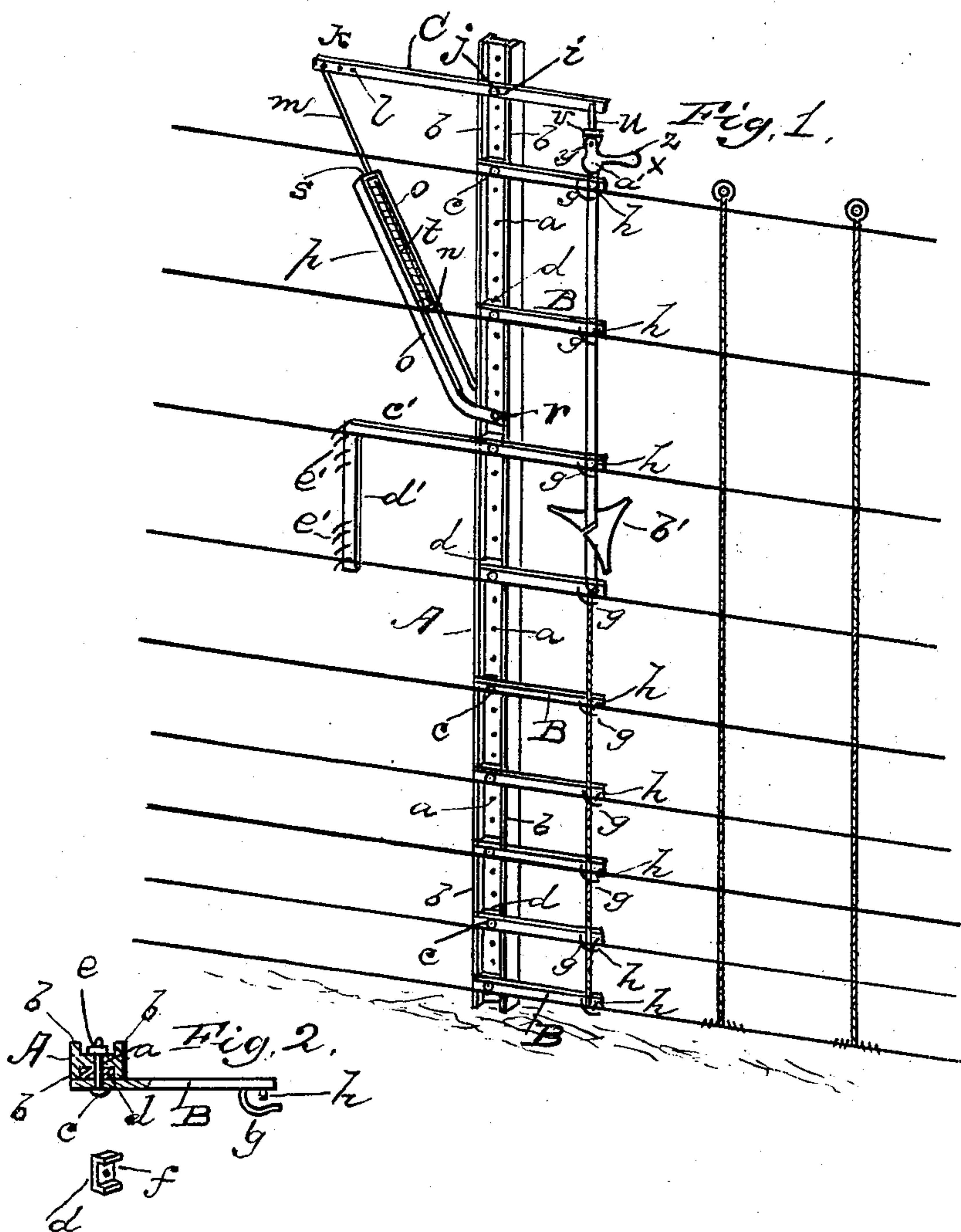
No. 615,870.

Patented Dec. 13, 1898.

P. M. MISHLER.
WIRE FENCE MACHINE.

(Application filed Aug. 23, 1898.)

(No Model.)



WITNESSES
Jas. B. Clarke
M. M. Morton

INVENTOR
P. M. Mishler
By E. H. Bates Attorney

UNITED STATES PATENT OFFICE.

PHARES M. MISHLER, OF HAGERSTOWN, MARYLAND.

WIRE-FENCE MACHINE.

SPECIFICATION forming part of Letters Patent No. 615,870, dated December 13, 1898.

Application filed August 23, 1898. Serial No. 689,311. (No model.)

To all whom it may concern:

Be it known that I, PHARES M. MISHLER, a citizen of the United States, residing at Hagerstown, in the county of Washington and State of Maryland, have invented certain new and useful Improvements in Wire-Fence Machines; and I do declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to the letters of reference marked thereon, which form a part of this specification.

This invention has relation to improvements in fence-machines; and it consists in the novel construction, arrangement, and combination of parts, whereby a simple and effective device is provided for providing a wire fence with vertical or oblique stay-wires, and it is an improvement on Letters Patent No. 587,043, granted to me for a similar device on July 27, 1897; and the object of the device is to provide the horizontal fence-wires with stays without the use of additional fastening devices or ties, all as will be hereinafter more fully explained.

The annexed drawings, to which reference is made, fully illustrate my invention, in which—

Figure 1 represents a perspective view of my stay-making machine, and Fig. 2 is a horizontal sectional view. Fig. 3 is a vertical section of the ring device. Fig. 4 is a detail of the spring and frame, and Fig. 5 is a plan view of the wrench.

Referring by letter to the accompanying drawings, A designates the main standard or support for the operating parts of the device, which is provided with a vertical row of perforations *a* and end flanges *b*, which when viewed in cross-section present an I-shaped iron or support, which has a twofold purpose—that of forming a vertical channel from one end of the support to the other end thereof and strengthening-ribs for the support—thus presenting a light frame which may be readily handled and at the same time a strong and durable support.

B indicates horizontal arms, which are designed to be adjusted vertically upon the supporting-bar A at suitable distances apart and

according to the distance the horizontal wires of the fence are strung. Said arms are provided with an opening in one end to receive a bolt *c*, which passes through the arm and a block *d* and through one of the perforations *a* of the support, where it is held firmly by a nut *e*, thus removably securing the arm to said support. This block *d* has a groove *f*, in which the end of the arm is held, thereby preventing said arm from turning, and in turn the block fits snugly in the channel between the two ribs of the support, whereby said block is held firmly in position on the standard. These arms B are provided at their free ends with a hook *g*, which is turned downward over the horizontal fence-wire, then forward over the stay-wire, and extending beyond a short pin *h*, which hook and pin hold the horizontal fence-wires in position while the brace or stay is being formed and applied to the fence.

C represents a lever which is pivoted at *i* by a bolt *j* to one of the perforations in the standard, the end *k* of which has a series of perforations *l*, to either of which is pivoted the upper end of an oblique rod *m*, the lower end thereof being provided with a sliding head *n*, that engages the side bars *o o* of a pivoted frame *p*, which latter frame is pivoted at *r* to one of the perforations *a* in the standard. Interposed between this sliding head and the upper cross-bar *s* of the pivoted frame is a coiled spring *t*, which surrounds the pivoted rod *m*, which spring provides a tension for the free end of the pivoted lever C when forming and applying the stays to the fence.

To the free end of the pivoted lever C is pivoted the upper end of a short rod *u*, while the lower end thereof is swiveled to a casting *v* or ring-forming device formed of two portions and having at its lower portion a circular projection *w*, that engages the upper end of the stay-wire, and an angular lever *x*, which is pivoted at *y* to the casting *v* and provided with a handle *z*, the two opposite jaws *a' a'* of said angular lever inclosing the lower portion of the casting and its circular projection between them, thus preventing the upper end of the stay from displacement with the circular projection after the same has been placed upon said projection and the angular lever forced down, inclosing the stay-

wire upon the projection and between the side jaws of the lever.

It will thus be observed from the above description, when taken in connection with the annexed drawings, that after the standard is placed in position and the upper end of the stay-wire is connected to the circular projection and held by the angular lever and the two strands of the stay-wire are placed on opposite sides of the horizontal fence-wires the stay-wire is kept taut by means of the pivoted lever, the coiled spring giving a constant pressure to the sliding head, and through the medium of the pivoted rod an upward pressure is given to the free end of the pivoted lever, thus keeping the stay-wire taut or under tension and at the same time yielding to the strain as the wires are shortened by the process of twisting in forming the stays, which twisting is accomplished by the wrench *b'*, which consists of a single piece having three handles and in the body thereof a kerf which receives the two strands of wire (the stay-wire) when the wrench is turned and the wire twisted between each strand of horizontal fence-wires, while the upper portion above the top fence-wire may be twisted by the angular lever, the swivel connection thereof permitting the same.

It will thus be seen that by my device no additional tie-wires or other devices are used in applying my stay to the fence, as I not only form the stay but apply it at the same time to the fence-wires in one and at the same operation.

In the drawings it will be observed that one of the arms *B* has an extension *c'*, with a downwardly-extended arm *d'*, forming an L-shaped bar, to which is secured a series of hooks *e'*, which engage the horizontal fence-wires, upon which the device slides in moving the same from place to place in applying the stays.

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

1. The combination with the standard, having the perforations, and arms having the hook and pin, of the rocking lever, pivoted to the standard, the swiveled ring-forming device pivoted thereto, and means substantially as described for giving the rocking lever the desired pressure, as specified.

2. The combination with the perforated standard having the channel, the grooved blocks having the perforation for the securing-bolt, of the arms provided with the hooks and pins, the swiveled ring-forming device, and the spring-actuated rocking lever, all substantially as described.

3. The combination with the channeled

standard and horizontal arms having the hooks and pins, of the grooved blocks, the rocking lever, and the ring-forming device pivoted to the free end of said lever, and consisting of the casting swiveled to the pivoted rod and the angular lever pivoted to the casting, said lever having the jaws formed integral therewith, all substantially as described.

4. The combination with the perforated standard provided with the arms carrying the hooks and pins and the ring-forming device, of the rocking lever pivoted to the standard, the oblique frame pivoted at its lower end to the standard, and the rod and spring connecting the rocking lever and pivoted frame to one another, all substantially as described and for the purpose set forth.

5. The combination with the channeled standard having the perforations, the arms carrying the hooks and pins, the ring-forming device, and spring-actuated rocking lever, of the L-shaped bar provided with the series of hooks, for the purpose set forth.

6. The combination with the standard, the arms thereof, and ring-forming device, of the rocking lever pivoted to said standard, having at one end the ring-forming device and at the other end the oblique rod surrounded by the spring and the frame, said spring interposed between the sliding head of the rod and the top cross-bar of the frame, all substantially as described.

7. In combination with the pivoted lever *C*, standard *A*, and frame *p* provided with the rod and coiled spring, and the arms *B*, of the ring-forming device comprising the casting formed of two portions and swiveled to the rod *n*, and the angular lever *x*, having the jaws *a' a'*, adapted to secure the stay-wire to the projection *w*, on the casting, all substantially as described.

8. A machine for forming and applying a cable stay to a wire fence, simultaneously, consisting of the ring-forming device, pivoted to a spring-actuated bar or tension device and adjustably mounted upon a standard, having horizontal arms provided with holding pins and hooks for the wires, substantially as described.

9. The combination with the standard and horizontal arms and ring-forming device, connected to the spring-actuated lever *C*, of the L-shaped bar *c'*, provided with the hooks *e'*, for the purpose set forth.

In testimony whereof I affix my signature in presence of two witnesses.

PHIARES M. MISHLER.

Witnesses:

JNO. D. BREWER,
GRAFTON DOWNS.