

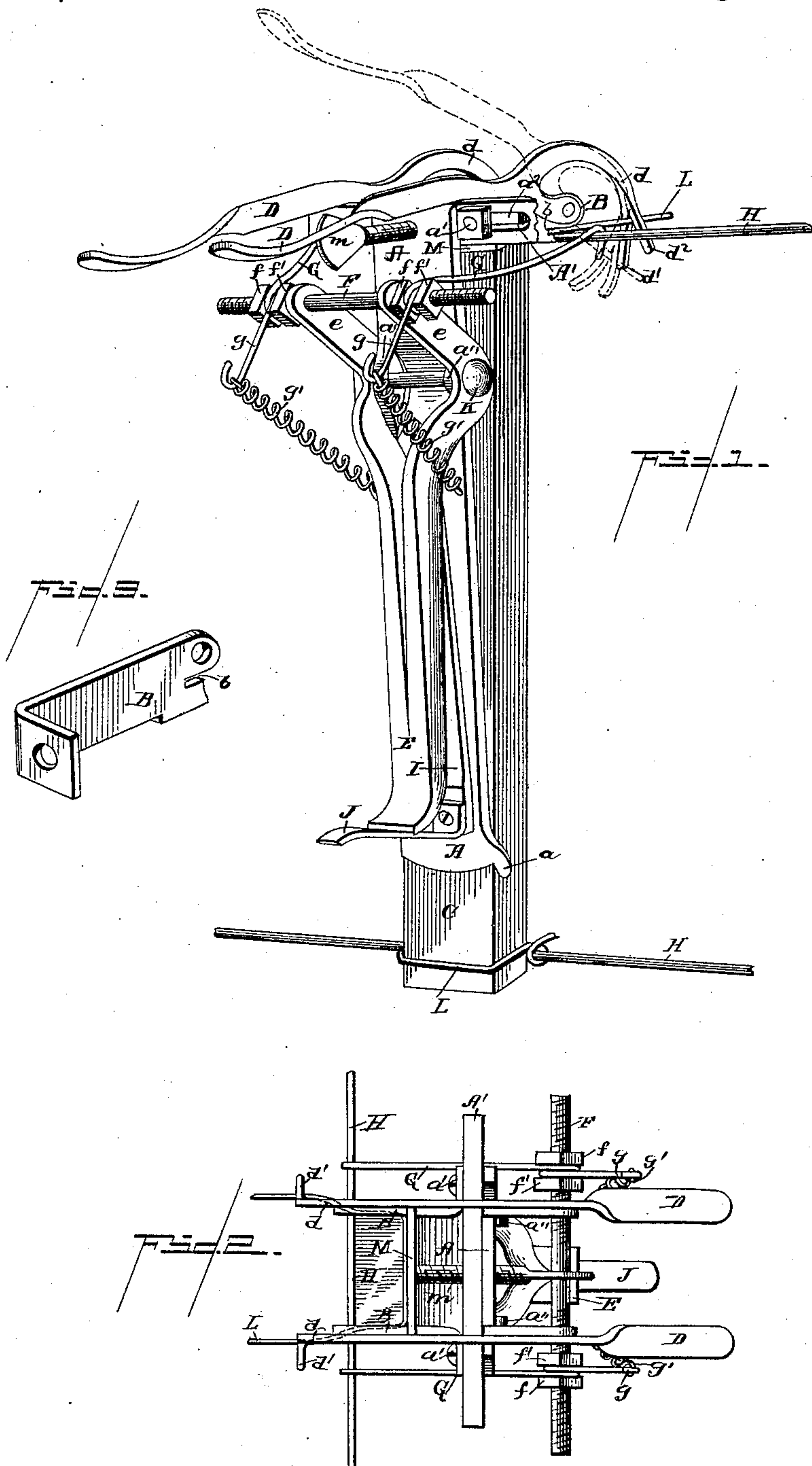
(No Model.)

E. P. NEWBANKS & J. SHIVLAR.

WIRE FENCE STAY BINDER.

No. 387,691.

Patented Aug. 14, 1888.



*WITNESSES.*

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# UNITED STATES PATENT OFFICE.

ELI P. NEWBANKS AND JOHN SHIVLAR, OF BELOIT, KANSAS.

## WIRE-FENCE STAY-BINDER.

SPECIFICATION forming part of Letters Patent No. 387,691, dated August 14, 1888.

Application filed May 2, 1888. Serial No. 272,575. (No model.)

*To all whom it may concern:*

Be it known that we, ELI P. NEWBANKS and JOHN SHIVLAR, citizens of the United States, residing at Beloit, in the county of Mitchell and State of Kansas, have invented certain new and useful Improvements in Wire-Fence Stay-Binders; and we 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 and figures of reference marked thereon, which form a part of this specification.

This invention relates to wire-fence stay-binders; and it consists of the novel features, which will be hereinafter more fully described and claimed and shown in the annexed drawings, in which—

Figure 1 is a perspective view, parts being broken away, of a wire-fence stay-binder of our invention, showing the application of the same; Fig. 2, an end view of the device, and Fig. 3 a perspective view of one of the standards.

The plate A is provided at one end with the lugs *a*, which embrace the edges of the stay or rail C, and at its other end with the standards B, which are adjustably connected with the cross-bar A' by the bolts *a'*, that pass through the slots *a''* in the ends of the said cross-bar, so that the standards can be separated or brought closer together to adapt them to stays or rails of varying widths. The levers D are pivoted to the standards B, and are provided with the wire-coiling arms *d*, that have their ends bifurcated or separated to form the prongs *d'* and *d''*, the prongs *d'* being the longer to prevent the slipping of the wire when twisting. The standards B are sufficiently wide to extend beyond the ends of the levers D, and are provided with notches *b* to receive the binding-wire L, which will be more particularly described hereinafter.

The lever E, pivoted between its ends to the plate A, is provided with the cross-bar F, which is threaded at its ends and provided with the nuts *f* and *f'*, between which the hooks G, mounted on the bar F, are held adjustably to correspond with the position of the standards B. The hooks have rear extensions, *g*, which have the springs *g'* inter-

posed between them and the plate A to force the ends of the hooks G outward and disengage them from the fence-wire H when the lever E is thrown up. The spring I, interposed between the lever and the plate, holds the longer end of the lever up or away from the plate A. The spring-catch J engages with the longer end of the lever and holds it down on the plate when the device is adjusted to the fence in position for binding the wire about the stay C and the fence-wire H. The front end of the lever is separated or divided to form the two arms *e*, and is pivoted to the plate A by the rod or bolt K, which passes through the arms *e* and through the ears *a'*, that are swaged up from the edges of the plate A.

To secure the rail or stay C to the fence-wires H, the plate A is placed on the said stay and held thereon from lateral displacement by having the lugs *a* and the standards B embrace its edges. The binding-wire L is placed on the stay C, and the ends thereof project on each side of the stay and fit in the notches *b* of the standards. The hooks G being pressed down and engaged with the fence-wire H, form an anchoring for the lever, which, when pressed down at its outer end, forces the end of the plate A, provided with the standards, close to the stay, carrying with it the ends of the binding-wire L, which ends are bent down close against the edges of the stay. The catch J holds the lever E down. By operating the levers D the forked ends of the wire-coiling arms *d* will engage with the ends of the binding-wire and wrap it around the wire H. The binding being completed, the device is detached by turning the levers D out and releasing the lever E from the catch J.

The stays C oftentimes vary in thickness, and to compensate for this variation the cross-bar A' is provided with an adjustable plate, M, which is arranged between the standards B and adjusted by the set-screw *m*.

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

1. The combination, with the plate having the standards B, of the levers D, pivoted to the standards and provided with the wire-coiling arms *d*, substantially as and for the purpose described.

2. The combination, with the plate having



the standards B, which are provided with the wire-receiving notches *b*, of the levers D, pivoted to the standards and provided with the wire-coiling arms *d*, substantially as and for the purpose described.

3. The combination, with the plate, the standards B, and means for adjustably connecting the standards with the plate, of the levers D, pivoted to the standards and provided with the wire-coiling arms *d*, substantially as described.

4. The combination, with the plate having the standards B, of the levers pivoted to the standards and having the wire-coiling arms *d*, the ends of the arms being bifurcated to form the prongs *d'* and *d''*, the prongs *d'* being the longer, substantially as set forth.

5. The combination, with the plate and the levers D, having the wire-coiling arms *d*, of the lever E and the hooks G, substantially as set forth.

6. The combination, with the plate and the levers D, having the wire-coiling arms, of the lever E, the cross-bar F, and the adjustable hooks G, substantially as and for the purpose described.

7. The combination, with the plate and the levers having wire-coiling arms, of the lever, the hooks G, connected with the front end of the lever, and the catch J, substantially as described.

8. The combination, with the plate and the levers having wire-coiling arms, of the lever E, the hooks having rear extensions, *g*, and the springs interposed between the extensions *g* and the plate, substantially as described.

9. The combination, with the plates A, the levers having the wire-coiling arms and the levers E, provided with the hooks G, of the plate M and means for adjustably connecting the said plate M with the plate A, substantially as and for the purpose described.

10. The herein shown and described wire-fence stay-binder, composed of the plate A, having the lugs *a* and the cross-bar A', the standards having wire-receiving notches *b*, adjustably connected with the cross-bar A', the levers D, having the wire-coiling arms *d*, the adjustable plate M, the lever E, the cross-bar F, threaded at its ends, the nuts *f* and *f'*, the hooks G, having extensions *g*, the springs *g'*, the spring I, and the catch J, substantially as specified.

In testimony whereof we affix our signatures in presence of two witnesses.

ELI P. NEWBANKS.  
JOHN SHIVLAR.

Witnesses:

JAMES KEMPTHORN,  
D. A. PERDUE.