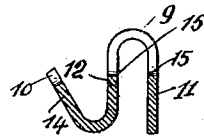
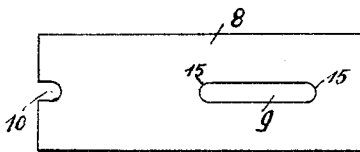
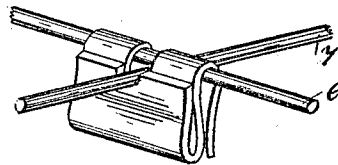
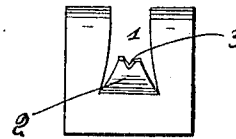
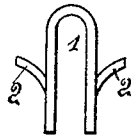
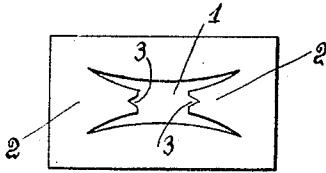
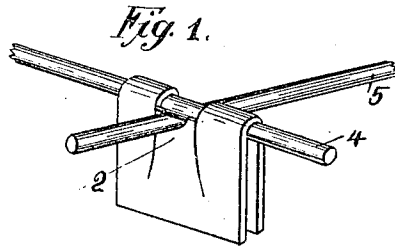


No. 812,053.

PATENTED FEB. 6, 1906.

L. G. LEASE.
WIRE STAY.

APPLICATION FILED MAY 20, 1905.



Witnesses:

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UNITED STATES PATENT OFFICE.

LYMAN G. LEASE, OF WARREN, OHIO, ASSIGNOR OF ONE-HALF TO
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WIRE-STAY.

No. 812,053.

Specification of Letters Patent.

Patented Feb. 6, 1906.

Application filed May 20, 1905. Serial No. 261,335.

To all whom it may concern:

Be it known that I, LYMAN G. LEASE, a citizen of the United States of America, residing at Warren, in the county of Trumbull and State of Ohio, have invented certain new and useful Improvements in Wire-Stays, of which the following is a specification, reference being had therein to the accompanying drawings.

This invention relates to certain new and useful improvements in wire-stays, and more particularly to a stay adapted to be used in connection with wire fences.

The object of this invention is to provide an inexpensive and simple wire-stay which can be easily and quickly clamped upon two wires to retain them in engagement with each other.

Another object of this invention is to provide a stay that can be economically sheared from a sheet of metal and then bent to conform to the desired shape employed for securing two wires together.

With the above and other objects in view the invention consists in the novel construction, combination, and arrangement of parts, which will be hereinafter more fully described and then specifically pointed out in the claims, and, referring to the drawings accompanying this application, like numerals of reference designate corresponding parts throughout the several views, in which—

Figure 1 is a perspective view of a wire-stay, illustrating the preferred manner of constructing the same. Fig. 2 is a top plan view of a wire-stay before it is bent to engage a wire. Fig. 3 is an edge view of the same in a bent form. Fig. 4 is a side elevation view of a wire-stay prior to mounting it upon a wire. Fig. 5 is a perspective view of a modified form of wire-stay. Fig. 6 is a plan view of the blank modified form of stay, and Fig. 7 is a vertical sectional view of the blank when bent to engage two wires.

To put my invention into practice, I preferably form my improved wire-stays of sheet metal, and a plurality of stays are adapted to be sheared at one operation, a suitable die being constructed to punch the blanks from the sheet of metal. My invention resides in the peculiar construction of the blank, which enables me to bend the blank whereby two wires may be locked in engagement with one another. To this end I have illustrated one of the blanks in Fig. 2 of the drawings, and

by referring to said figure it will be seen that the blank-stay is substantially rectangular in top plan view. The blank is cut away, as indicated at 1, forming inwardly-extending prongs or lugs 2 2, and the confronting ends of the prongs are sheared to form notches 3 3. The stay-blank is now in condition to be bent to engage the wires 4 and 5, and in order to secure the two wires together it is necessary that one wire be placed at right angles to the other—that is, one wire should cross the other wire at right angles, as clearly illustrated in Fig. 1 of the drawings. The blank is bent to a substantially inverted-U shape, as illustrated in Fig. 3 of the drawings, the prongs 2 2 being bent outwardly. The stay is now placed over the wire 4, and the wire 5 is passed between the wire 4 and the prongs 2 2, at which time the prongs 2 2 are bent inwardly to engage the surface of the wire 5. To accomplish this, I preferably employ pliers or pincers which will span the stay and engage the prongs in order that they may be bent inwardly. The engagement of the upper ends of the prongs 2 2 with the wire 5 forces the same into engagement with the wire 4 and forms a positive lock for the wire 4 within the stay.

In Figs. 5 to 7, inclusive, I have illustrated a modified form of construction wherein the wires 6 and 7 are locked together similarly to the wires 4 and 5. To accomplish this, I employ a blank 8, similar to the blank-stay heretofore described, with the exception that I provide the blank with a longitudinally-disposed slot 9, which is formed, preferably, near one end of the blank, while the other end of the blank is provided with a cut-away portion 10, alining longitudinally with the slot 9. The blank-stay 8 is now bent into a substantially S shape, as illustrated in Fig. 7 of the drawings. The portions 11 and 12 of the blank lie parallel to one another, while the end of the blank 14 lies slightly out of a parallel plane with the portion 12 until the wires have been placed in position within the stay. By referring to Fig. 5 of the drawings it will be seen that the stay is placed over the wire 6, similar to the operation heretofore described of placing the stay shown in Figs. 1 to 4 in position, and that the wire 7 is passed beneath the wire 6 and rests upon the ends 15 15 of the slot 9. The end 14 of the stay is then bent upwardly until the cut-away portion 10 engages the wire 7, at which time the wire

will be forced upwardly into engagement with the underneath surface of the wire 6. To accomplish this, I employ a pair of pliers or pincers the gripping-jaws of which are adapted to engage the ends of the stay and compress them together, as illustrated in Fig. 5 of the drawings.

In constructing my improved stays in the above-described manner I provide an effectual and positive lock for securing two cross-wires together, and the simplicity of the stays and the manner of securing them upon cross-wires permits of the stays being manufactured at a comparatively small cost and easily and quickly placed in position to lock two cross-wires together.

It will be noted that various changes may be made in the details of construction without departing from the general spirit and scope of the invention.

What I claim, and desire to secure by Letters Patent, is—

1. A wire-stay consisting of a substantially U-shaped piece of metal having an opening formed therein, said piece of metal being bent to engage wires passing through said opening, substantially as described.

2. A wire-stay consisting of a piece of metal having an opening formed therein, said

piece of metal being bent to engage wires passing through said opening.

3. A wire-stay consisting of a piece of metal having an opening formed therein, said piece of metal being bent to a substantially S shape to retain wires passing through said opening and the layers of metal formed by the bending of said piece, substantially as described.

4. A wire-stay consisting of a substantially S-shaped piece of metal, said piece of metal having openings formed therein through which wires are adapted to pass, substantially as described.

5. A wire-stay consisting of a piece of metal of substantially U shape, and having an opening intersecting the bend, and having an integral portion extending from below the said opening upwardly toward the same, said integral portion having its upper end notched to receive a wire extending through said opening.

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

LYMAN G. LEASE.

Witnesses:

W. A. SPILL,

A. E. WONDERS.