

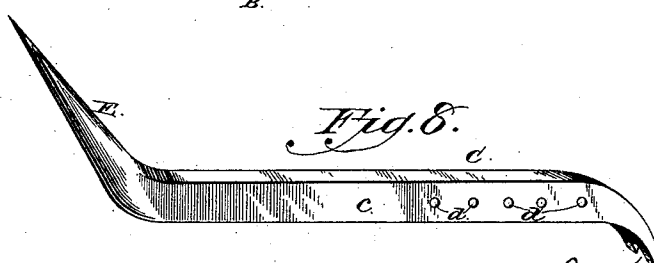
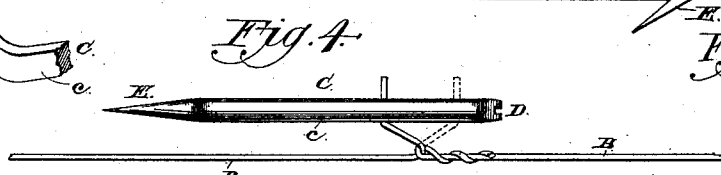
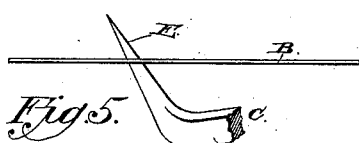
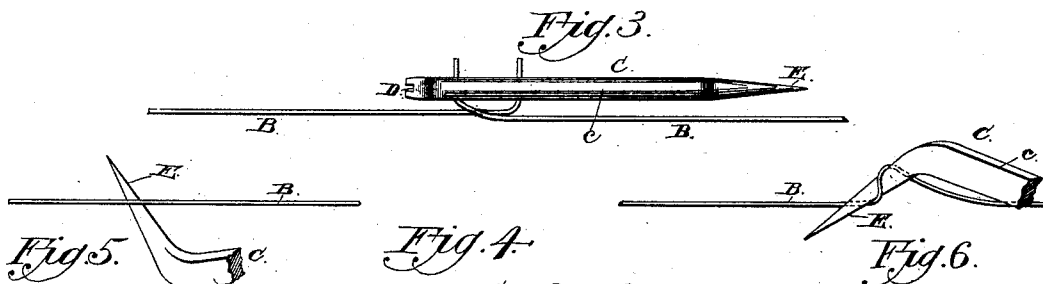
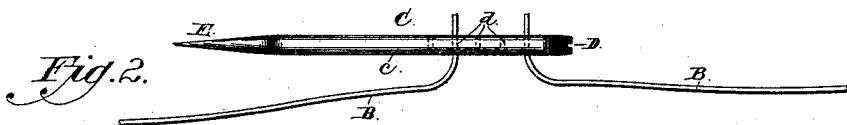
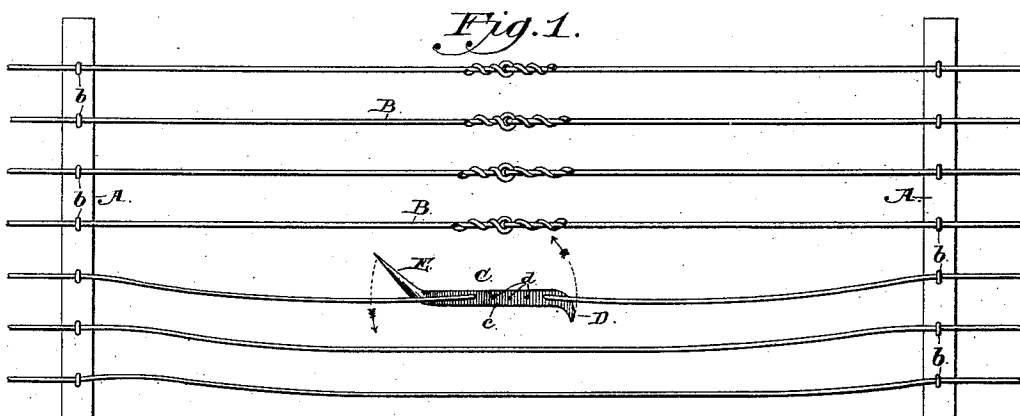
(No Model.)

J. H. LEA.

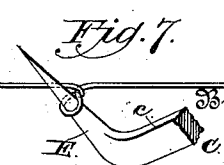
WIRE SPLICER AND STRETCHER.

No. 358,044.

Patented Feb. 22, 1887.



Witnesses  
*M. E. Fowler*  
*E. G. Siggall*



Inventor  
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# UNITED STATES PATENT OFFICE.

JOHN HOUSTON LEA, OF CHARLIE, TEXAS.

## WIRE SPLICER AND STRETCHER.

SPECIFICATION forming part of Letters Patent No. 358,044, dated February 22, 1887.

Application filed December 8, 1886. Serial No. 220,992. (No model.)

*To all whom it may concern:*

Be it known that I, JOHN HOUSTON LEA, a citizen of the United States, residing at Charlie, in the county of Clay and State of Texas, have  
5 invented new and useful Improvements in Wire Splicers and Stretchers, of which the following is a specification.

My invention relates to improvements in devices for stretching and splicing wires for  
10 fences, telegraph-lines, &c., and has for its object to provide a cheap, simple, and efficient device which may be carried in the pocket, and thus always be at hand when desired for use. This object I attain by the device shown in  
15 the accompanying drawings; and the novelty consists in certain peculiar features of the same, as will be hereinafter fully described, and set forth in the claims.

In the drawings, Figure 1 is a side elevation  
20 of a fence having my improved stretcher and splicer in position for operation thereon. Figs. 2, 3, and 4 are plan views showing the method of using my device as a splicer. Figs. 5, 6, and 7 are views illustrating the manner of  
25 using my device as a stretcher, and Fig. 8 is a detail perspective view of the improved stretcher and splicer.

Referring to the drawings by letter, A indicates the fence-posts, and B the wires, secured  
30 thereto by staples *b* in the usual manner. The upper wires in the drawings are shown as having been spliced. The lowest two wires are shown as being loose or slack, and one of the middle wires is shown as provided with my  
35 device in position for stretching and splicing the same.

My stretcher and splicer C is made in a single piece from metal, hard wood, or any other  
40 suitable material, and consists of a body, *c*, provided with a series of perforations, *d*, and having its ends turned in opposite directions, so as to provide means for readily grasping and operating the device. One end of the  
45 stretcher is formed into a claw, D, and the other end, E, is tapered to a point, as shown. The tapered or pointed end E can be used to mark the points on the posts at which it is desired to drive the staples and to form openings for the entrance of the legs of the same.

50 The claw D it will be readily seen, is adapted to withdrawing the staples when so desired,

and the device may be used to drive the staples by grasping it by the tapered end and using the other and larger end as a hammer.

When it is desired to use my device to splice  
55 wires, the ends of the wires are inserted through the perforations *d*, as shown in side elevation in Fig. 1 and in plan view in Fig. 2. The splicer is now turned in a vertical plane, as indicated by the arrows, Fig. 1, the ends making a complete revolution. At the end of the  
60 first half-revolution the ends of the wires have been drawn past each other, as shown in Fig. 3, and at the end of the complete revolution they will have been drawn past each other or  
65 lapped, as shown in Fig. 4 in full lines on the left and dotted lines on the right. The operation just described may be repeated any desired number of times and the well-known wire  
70 tie thus formed. I prefer, however, to tie the wires as shown in the drawings, and this tie may be made very rapidly. The end of the wire nearest the claw is removed from the  
75 splicer and bent back upon itself and wrapped around the main line of wire, as shown most clearly in Fig. 4. The other wire may then be treated in the same manner, and the fastening will be completed. The tie can be finished  
80 by twirling the splicer around the line, the claw D resting upon the line and forming a center for the splicer to turn on. This will cause the unwrapped wire to twist around the line, as will be readily understood.

The device may be used in an analogous  
85 manner to stretch slack wires, pins or pegs being inserted in the perforations *d* and the wire being passed over and under the pins, a revolution of the stretcher will cause the wire to lap upon itself, and as the operation continues the wire will gradually tighten until the  
90 desired tension is gained.

The most usual manner of using my device as a stretcher is as follows, and as illustrated  
95 in Figs. 5, 6, and 7: In this method the stretcher is held by the larger end, with the tapered end bearing against the under side of the wire. The larger end is then swung around in a horizontal plane, care being taken to hold the point E against the wire, as shown in  
100 Figs. 5 and 6. This action will cause the wire to wrap around the point, forming a loop, and as the operation continues the base of the loop

will form the ordinary tie and fasten the wire. The tapered end is then slipped out of the loop and the operator is ready to work on another wire.

5 It will be seen that the splicer forms a connecting-link between the two wires and acts as a lever upon each one to draw it toward the other, and when the two wires have been lapped upon each other serves as a lock or  
10 brake to hold them against any reaction before the tie is finished.

Owing to the extreme simplicity of my device it can be manufactured at a slight cost and can be carried in the pocket, so as to be  
15 always on hand for use whenever a broken or loose wire is discovered in the fence.

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

20 1. A wire-splicer consisting of a perforated

bar having its ends turned in opposite directions, substantially as and for the purposes specified.

2. A wire-stretcher consisting of a suitable body, as *c*, provided with a series of perfora- 25 tions, and having its ends turned in opposite directions, one end being tapered to an edge and notched and the other end being pointed, substantially as described and shown.

3. A wire-stretcher comprising a suitable 30 body, as *c*, having one end pointed and bent out of line with the main body, substantially as set forth.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in pres- 35 ence of two witnesses.

JOHN HOUSTON LEA.

Witnesses:

T. H. WILSON,

RUFUS F. HOLLIMON.