

No. 613,078.

Patented Oct. 25, 1898.

R. B. ROBBINS.
WIRE FENCE.

(Application filed May 28, 1898.)

(No Model.)

Fig. 1.

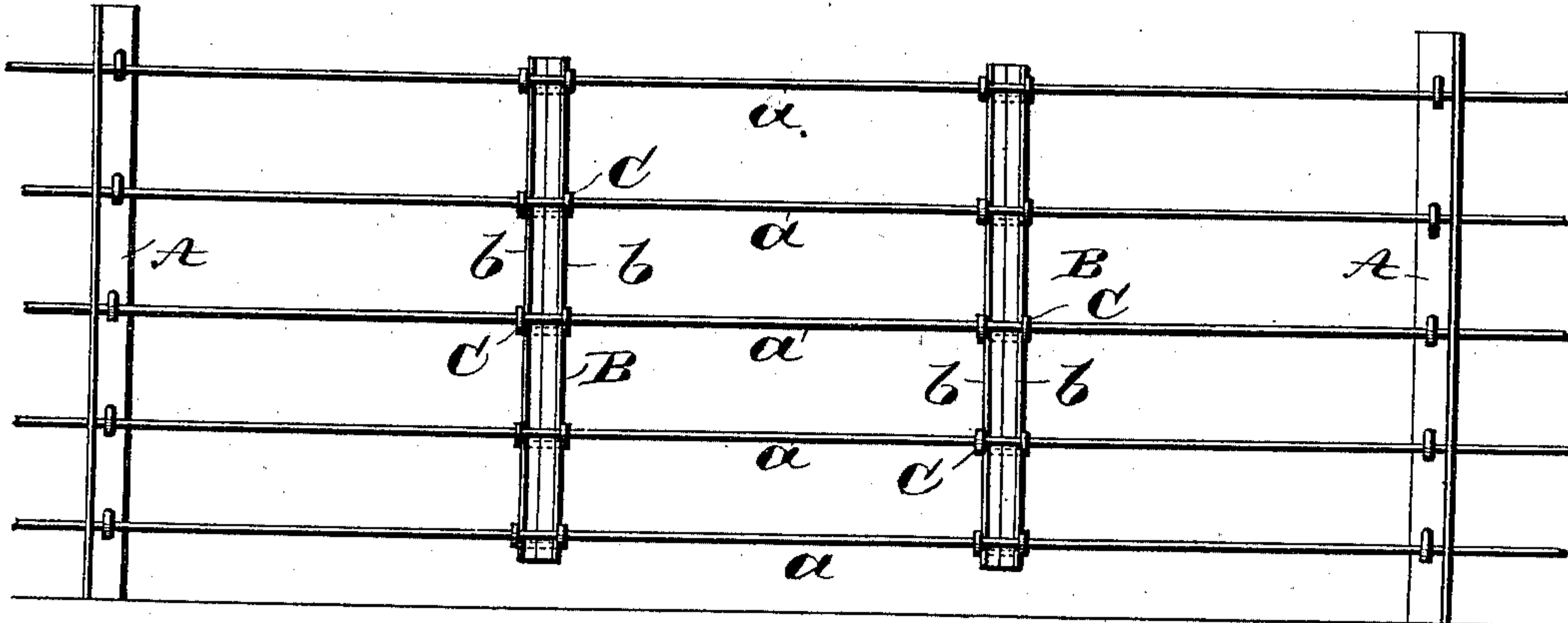


Fig. 2.

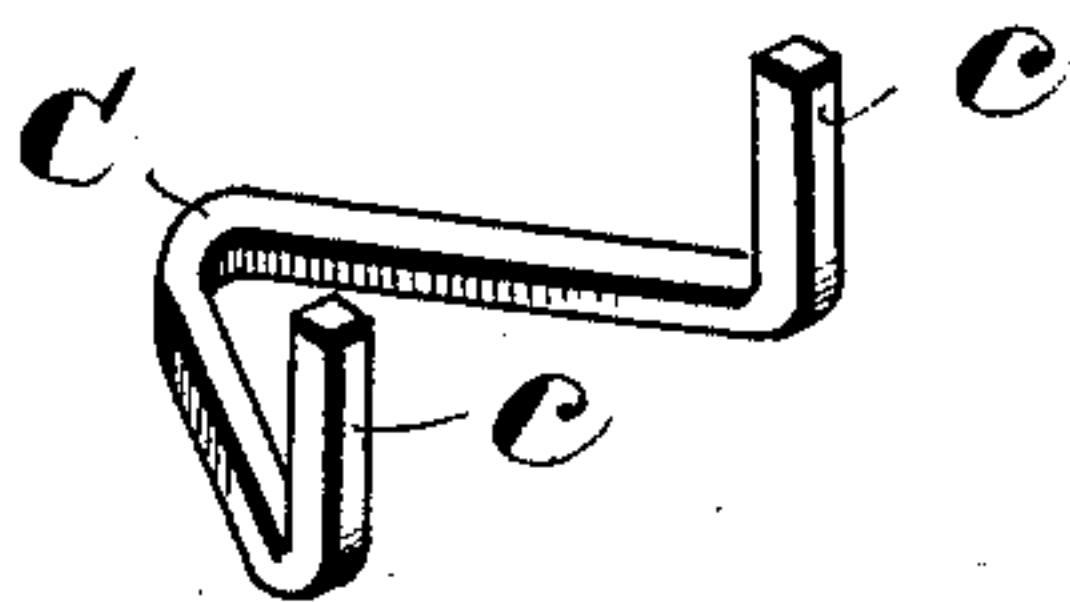


Fig. 3.

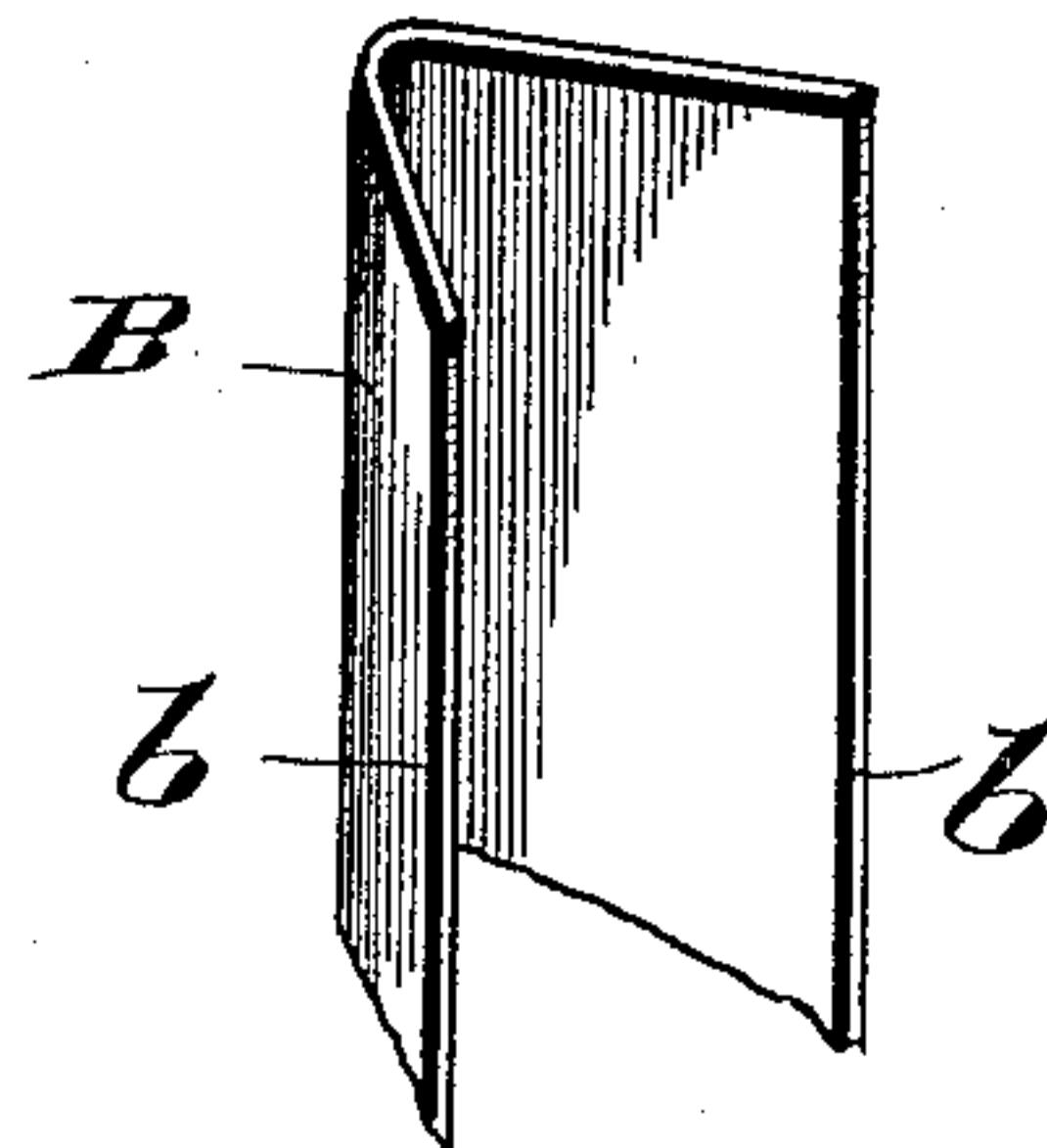


Fig. 4.

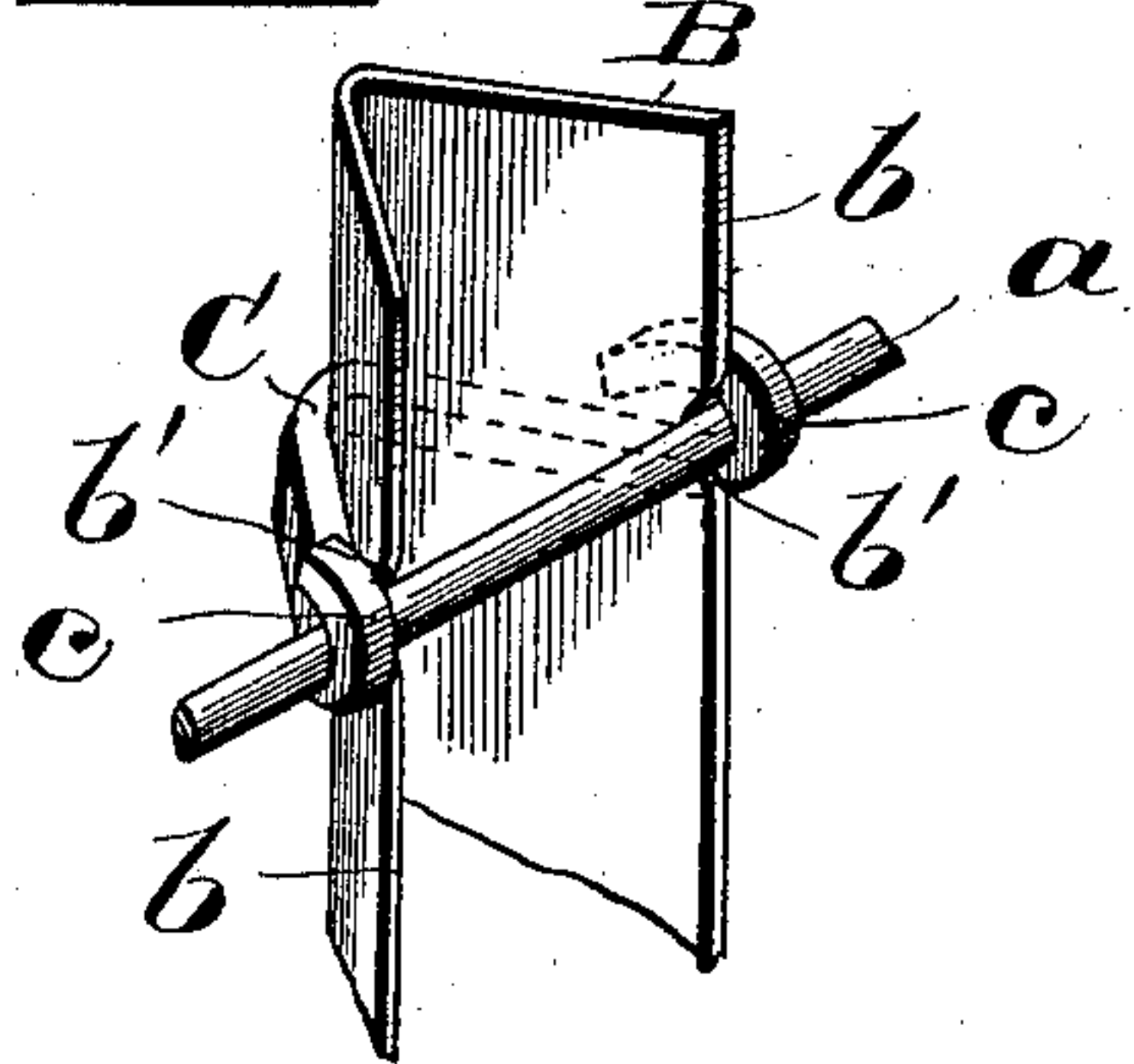
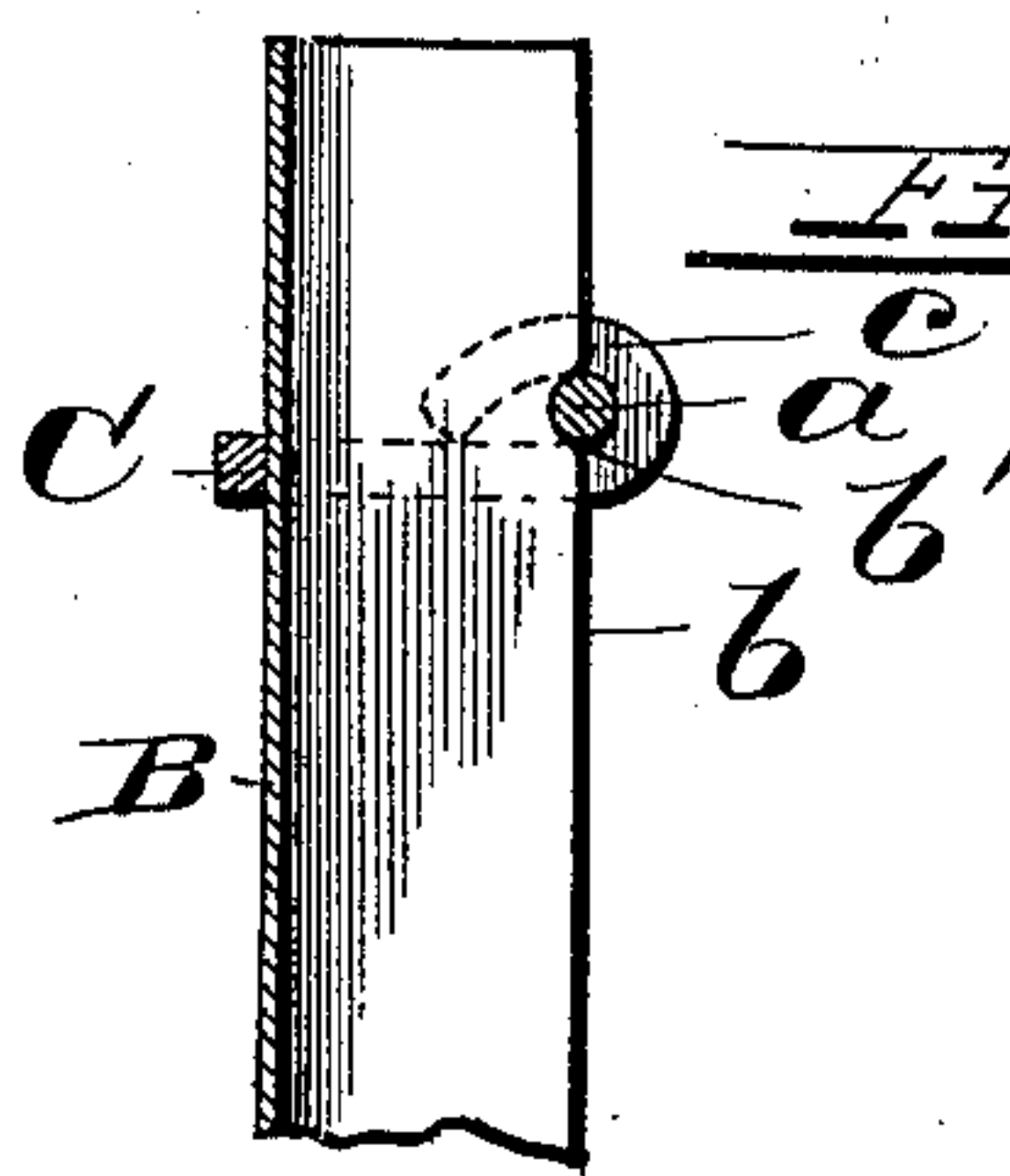


Fig. 5.



WITNESSES—

G. A. Pauberschmidt,
J. D. Kugshery.

INVENTOR—

Richard B. Robbins.
by his atty
Whitaker & Brown

UNITED STATES PATENT OFFICE.

RICHARD B. ROBBINS, OF ADRIAN, MICHIGAN.

WIRE FENCE.

SPECIFICATION forming part of Letters Patent No. 613,078, dated October 25, 1898.

Application filed May 28, 1898. Serial No. 682,041. (No model.)

To all whom it may concern:

Be it known that I, RICHARD B. ROBBINS, a citizen of the United States, residing at Adrian, in the county of Lenawee and State of Michigan, have invented certain new and useful Improvements in Wire Fences; and I do hereby 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.

My invention consists in an improved metal tie for uniting vertical stays V-shaped in cross-section to the line-wires of wire fences without previously notching or otherwise treating the edges or other portions of the stays; and it consists in the novel features hereinafter described, reference being had to the accompanying drawings, which illustrate one form in which I have contemplated embodying my invention, and said invention is fully disclosed in the following description and claims.

In the drawings, Figure 1 represents a panel of wire fence provided with vertical stays secured to the line-wires in accordance with my invention. Fig. 2 represents the attaching-staple which I employ. Fig. 3 is a perspective view of a portion of one of the vertical stays. Fig. 4 represents a portion of one of the stays and a line-wire, showing them tied together according to my invention. Fig. 5 is a vertical sectional view of the parts shown in Fig. 4.

In the manufacture of wire fences it is customary to employ vertical stays secured to the line-wires intermediate the fence-posts, and for this purpose a stay composed of sheet metal rolled or bent in a V shape in cross-section has been employed. In using such stays, however, it is necessary to provide against the slipping of the stay vertically or horizontally with respect to the line-wires to which it is attached, and in order to accomplish this result it has been customary to punch holes in the stays adjacent to their edges or to notch or recess said edges before the stays are placed in engagement with the line-wires. It is extremely desirable in making stays for wire fences that they should be as light as possible, so as not to make the line-wires sag, and also that they shall be as stiff and rigid as possible to stiffen and strengthen the panels of the fence. When these V-shaped

stays are employed, it is desirable to make them of very thin metal for lightness; but it is found that when such stays are notched or punched for the reception of the line-wires their strength and rigidity are greatly impaired and they can be easily bent or broken. If the stays, on the other hand, are made of heavier metal, so as to withstand such bending and breaking strains after being punched or notched they are so heavy as to cause the line-wires to sag and are much too expensive for practical and extensive use.

In carrying out my invention I make the stays of very light material and do not punch, notch, or in any way treat the vertical edges of the same. I then attach them to the line-wires by a peculiar form of staple or securing device and unite the parts so tightly as to cause the line-wires to slightly indent the vertical edges of the stay, thereby locking them against any movement with respect to the wires and without weakening the stays. By this means I can employ the lightest possible stay, and yet obtain a stiffness and rigidity that would be possible only with a much heavier and costly stay the edges of which had been treated to receive the line-wires. Thus I effect a saving of material and also a saving of labor usually required to prepare the edges of other stays, and I obtain a light, strong, rigid, and effective stay at a very greatly reduced cost.

In the drawings, A A represent two fence-posts, between which is a panel of wire fence, and *a a* are the line-wires.

B represents one of the vertical stay-bars or stays, V-shaped in cross-section (shown in detail, Fig. 3) and formed of light sheet metal with straight vertical edges *b b*.

C represents the securing device or staple which I employ. This staple is formed of wire or rod of small diameter, preferably square in cross-section. It is bent in angular form to conform to the angle of the stay and has its ends *c c* bent at right angles to the main or central portion.

In making the tie the stay B is placed vertically, with its edges *b b* in engagement with the line-wires of the fence. The staple C is then placed around the stay with its ends *c c* in engagement with one of the line-wires, and the ends *c c* are then bent around the line-

wire and forced toward the stay with such force as to cause the line-wire to indent the vertical edges of the stay slightly, as shown at *b' b'*, Figs. 4 and 5, and embed itself therein, thus forming a strong tie which prevents any movement of the stay and line-wire with respect to each other. The same tie is formed at each intersection of the stay with the line-wires, as shown in Fig. 1. The bending of the ends of the staple to cause the line-wire to indent the stay may be accomplished by any desired means, such as a pair of pincers, a hammer and movable anvil, or a specially-constructed tool.

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

1. A metal tie comprising among its members, a bar formed of sheet metal bent into V shape in cross-section and provided with straight, plain, longitudinal edges, a wire engaging the parallel edges of said bar perpendicularly thereto and a V-shaped clamping-staple engaging the angular portion of the bar and having its ends bent around the wire to draw the same into firm contact with the plain straight edges of the bar, and causing said wire to seat itself slightly in said edges,

whereby the wire and bar will be locked firmly together, without previously notching or recessing the edges of the bar, substantially as described.

2. A wire fence including among its members a series of horizontal line-wires, vertical stay-bars composed of thin sheet metal bent into V shape in cross-section, and having straight, plain, longitudinal edges, engaging the line-wires, the stay-bars and line-wires being secured together at each intersection thereof, by a V-shaped staple engaging the angular portion of the stay and having its ends bent around the line-wire, to draw the wire into firm contact with the said straight, plain edges of the stay-bar, and cause it to seat itself slightly in said edges, whereby the wires and stay-bars will be locked rigidly together at each intersection without previously notching or recessing the stays, substantially as described.

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

RICHARD B. ROBBINS.

Witnesses:

DORA D. RENIFF,

LESLIE B. ROBERTSON.