

No. 711,450.

Patented Oct. 14, 1902.

G. H. WRIGHT.
FENCE WIRE FASTENER.

(Application filed Mar. 12, 1902.)

(No Model.)

Fig. 1.

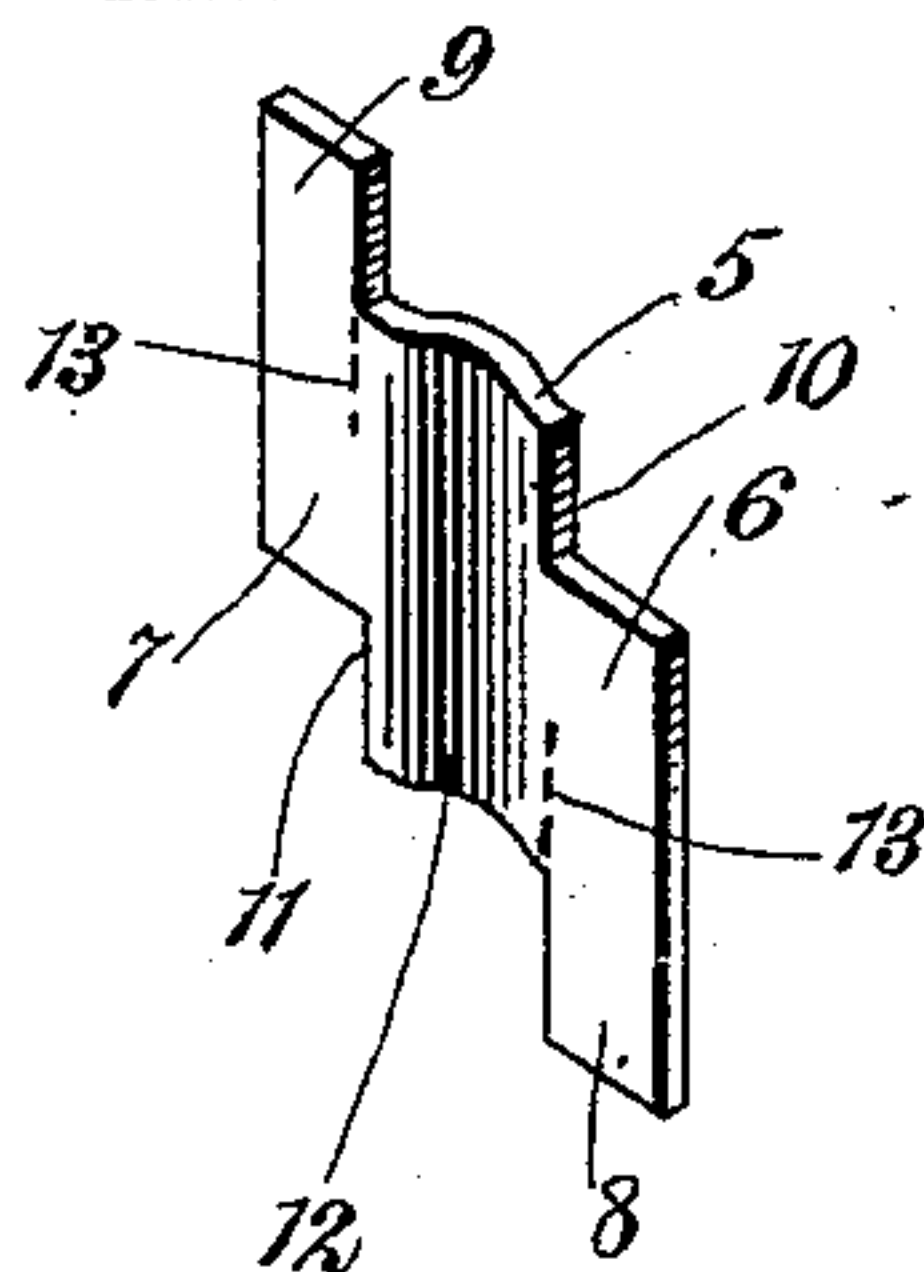


Fig. 2.

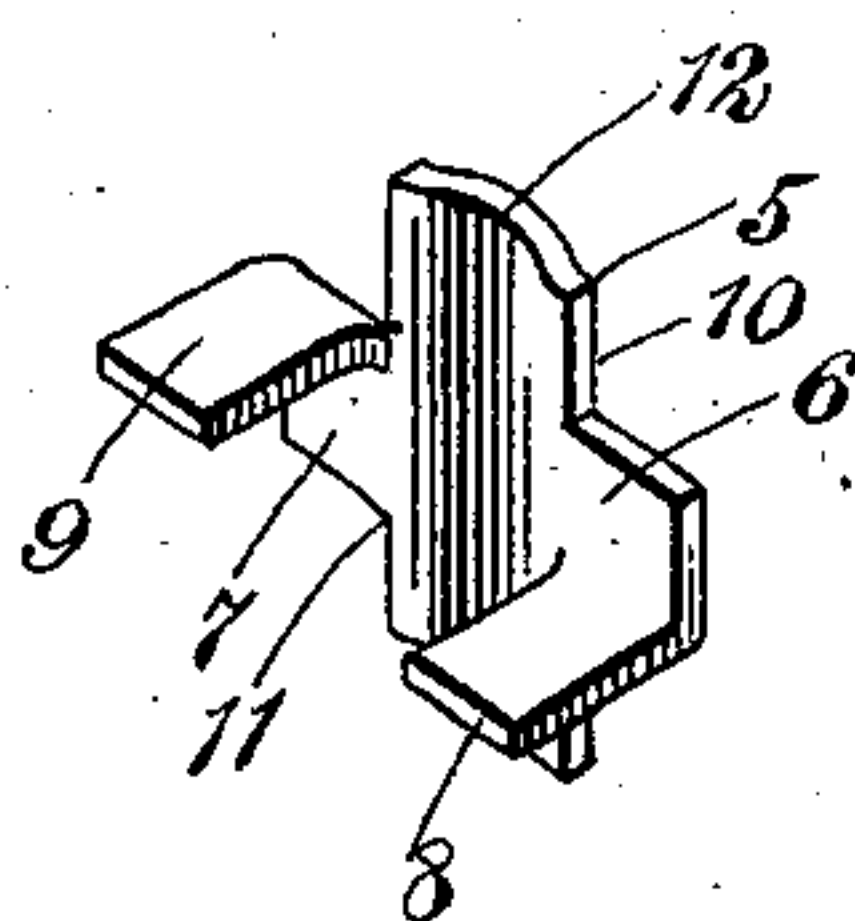


Fig. 3.

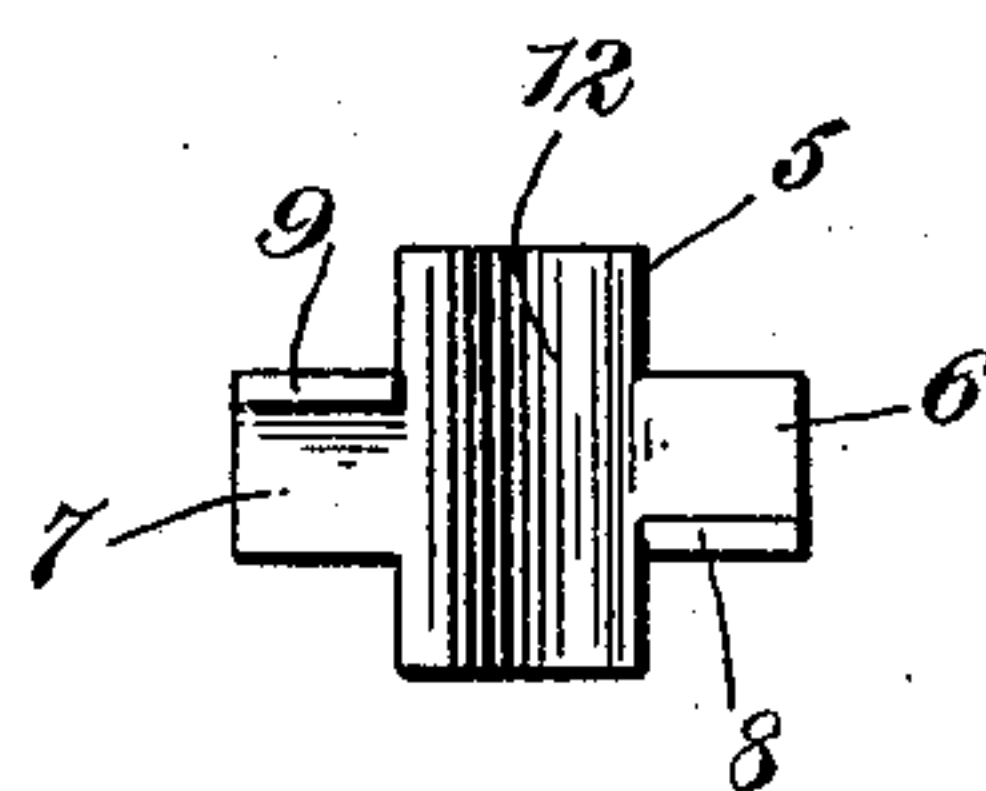


Fig. 4.

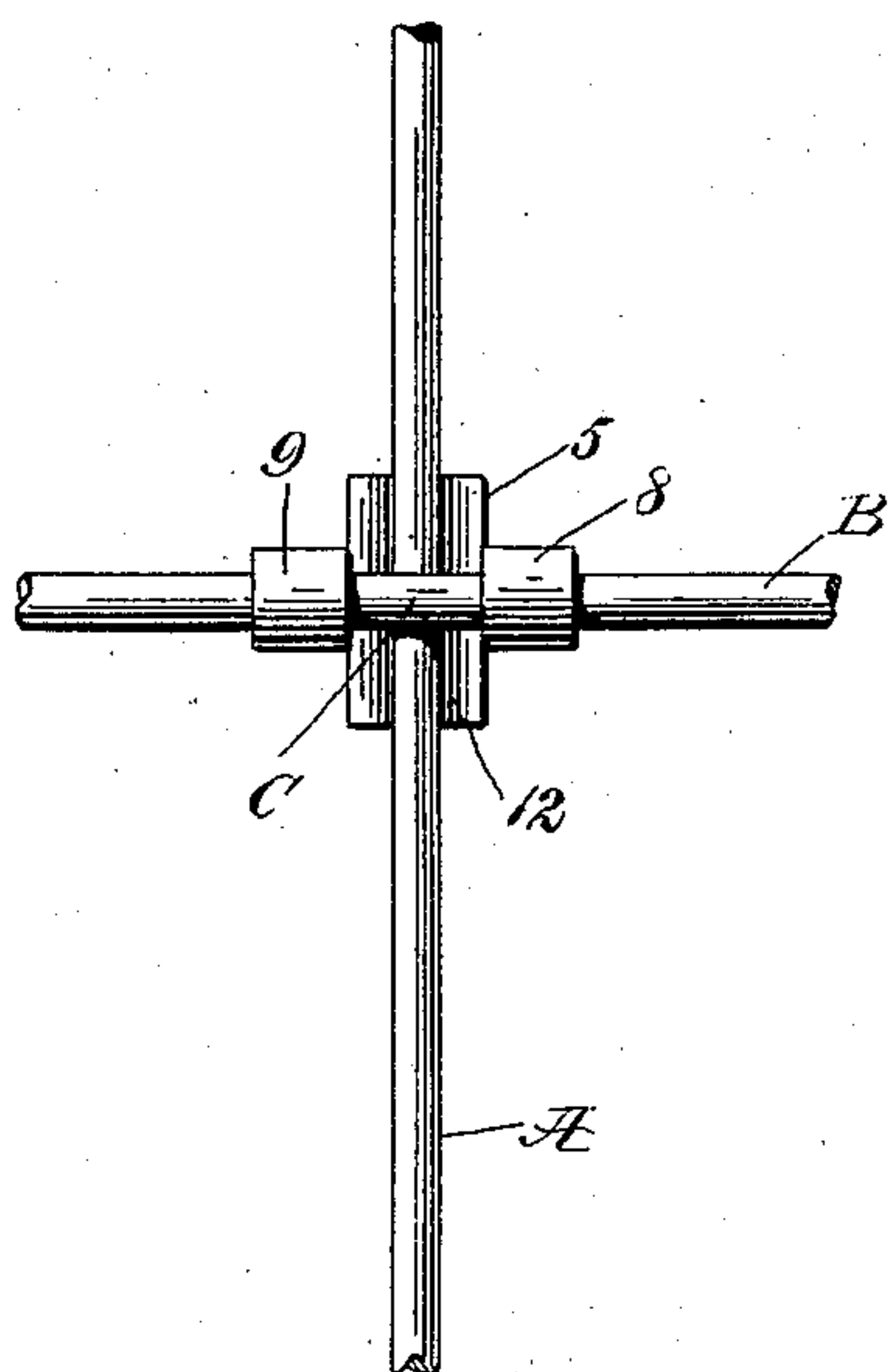
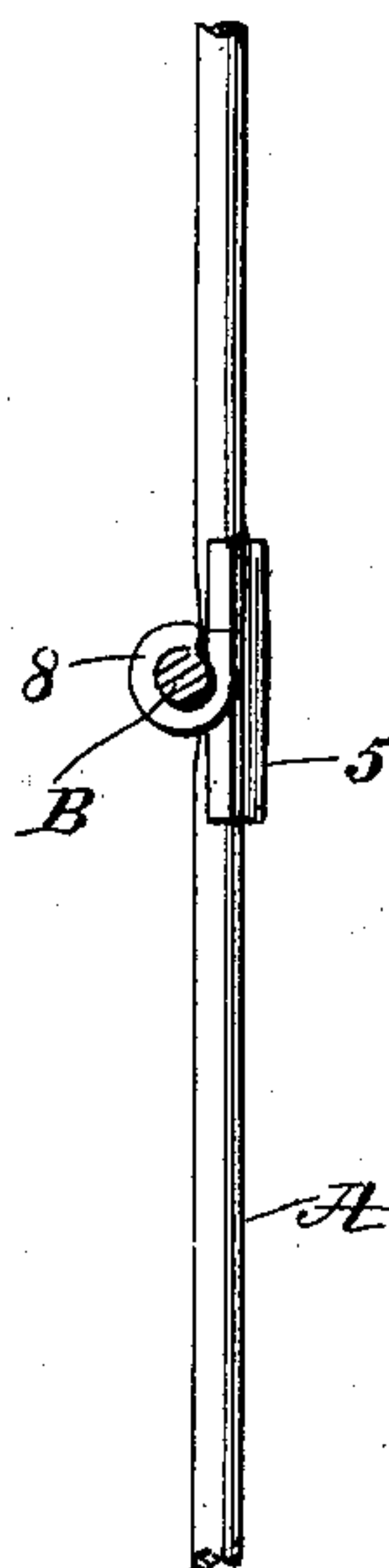


Fig. 5.



WITNESSES:

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FENCE-WIRE FASTENER.

SPECIFICATION forming part of Letters Patent No. 711,450, dated October 14, 1902.

Application filed March 12, 1902. Serial No. 97,831. (No model.)

To all whom it may concern:

Be it known that I, GEORGE HENRY WRIGHT, a citizen of the United States, and a resident of Spokane, in the county of Spokane and State of Washington, have invented new and useful Improvements in Fence-Wire Fasteners, of which the following is a full, clear, and exact description.

My invention relates to a fastener especially adapted to unite or clamp crossing wires, such as the line-wire and stay-wire or picket of a fence, either ornamental fencing or plain farm-fencing, or for wire screens or fabrics generally.

The object of this invention is to provide a fastener which can be rapidly and economically manufactured by stamping the same without loss or waste of material from a cold sheet of rolled metal—such as sheet steel, brass, or the like—which may be easily applied to the wires at and adjacent to the crossing-point thereof, which shall operate to securely hold itself on the wires and to add materially to the strength of the joint formed by the wire and the clamp, and which during application to the crossing wires shall effect the bending of the wires at the point of intersection, so as to make the bends cooperate with part of the fastener in holding the wires in proper position and in effectually retaining the clamp or fastener against any tendency to displacement on the wires.

With these ends in view the invention consists in the peculiar construction of a clamp or fastener especially adapted for uniting crossing wires, as will be hereinafter fully described, and the actual scope of the invention will be defined by the claims.

Reference is to be had to the accompanying drawings, forming a part of this specification, in which similar characters of reference indicate corresponding parts in all the figures.

Figure 1 is a perspective view of a sheet-metal blank stamped in a single piece from a sheet of material. Fig. 2 is a view of the complete clamp or fastener made from the blank of Fig. 1 and ready for application to the crossing wires. Fig. 3 is a face or plan view of the complete clamp or fastener represented by Fig. 2; and Figs. 4 and 5 are views in side and edge elevation, respectively, showing the application of my improved clamp or

fastener to the line and stay wires of a wire fence.

5 designates the blank of the clamp or fastener, which is provided with the integral wings 6 7, from which are extended the bendable arms 8 9, respectively. This blank is stamped or struck up in a single piece and in the form shown by Fig. 1, the blank being produced at one stroke of a die from a sheet of steel, brass, or other appropriate sheet metal. On the side of the blank having the wing 6 a notch or cut-out portion 10 is formed in one corner, and from the other corner of the blank is extended or projected the arm 8. The opposite edge portion of the blank is similarly formed, but in reverse order—that is to say, a cut-out portion or notch 11 is formed in the lower edge of the left-hand corner of the blank, while the arm 9 is extended from the upper corner of the left-hand edge of said blank. The notches 10 11 correspond in form and dimensions to the extending arms 8 9. The notches 10 11 lie at diagonally opposite corners of the blank, and the arms 8 9 are also disposed at the remaining corners of the blank and in diagonal relation to one another and to the blank. During the operation of stamping the blank from a piece of sheet metal the body portion 5 of said blank is bent or creased longitudinally or centrally, as indicated at 12, and this crease can readily be performed at the stamping operation by a properly-constructed die.

The peculiar shape and contour of the blank enables it to be rapidly and economically manufactured from sheet metal without waste or loss of material, because the notched or cut-out portions of one blank will match or register with the extended arm portions of another blank or blanks, and thus the entire metal in a sheet of material is utilized in the formation of the blank, so that no waste of material is involved in the manufacture of the clamps or fasteners.

After the blank shall have been stamped in flat form, as represented by Fig. 1, it is subsequently sheared and bent to the shape represented by Figs. 2 and 3, this shearing and bending operation being preferably performed by another suitably-constructed die. The blank after having been stamped is transferred to another die, where the wings 6

and 7 are slitted or sheared along the lines indicated at 13 in Fig. 1, thereby prolonging the arms 8 9 and reducing the lengths of the wings. The die which shears the blank, as described, serves at the same operation to bend the prolonged arms 8 9 in opposite directions and to positions at right angles to the plane of the blank 5, as clearly shown by Figs. 2 and 3. By reference to Fig. 1 it will be seen that the right-hand edge of the blank has the wing 6 sheared or slitted from the bottom toward the top edge of the blank, while the left-hand edge of said blank has the wing 7 slitted or sheared in a reverse direction or from the top edge toward the bottom edge. This reversal in the order of slitting the blank allows the arms 8 9 to be bent in opposite directions by the die.

Although I have shown and described the blank as being first stamped at one operation and then sheared and bent at a subsequent operation, I do not desire to strictly confine myself to this special sequence of operations in the manufacture of the clamp, because under some circumstances it may be stamped, sheared, and bent at one operation by a suitable die or machine.

The clamp in the condition represented by Figs. 2 and 3 is ready for application to the crossing wires of the fence, and said clamp can be easily and quickly applied and clenched by an implement or tool of any suitable character, but preferably that disclosed in an application shortly to be filed by me for Letters Patent for an implement for applying and clenched fence-wire clamps.

In Figs. 4 and 5 are represented the clamp or fastener in the position upon two wires indicated at A B, respectively, of which A represents the stay-wire or wire picket of any ordinary plain farm-fence, while B indicates the longitudinal or line wire of a fence. In applying the clamp the grooved body portion 5 is arranged to fit against one edge of the stay-wire A, while the arms 8 9 are disposed adjacent to the line-wire B and on opposite sides of the stay-wire A. The clamp having been brought to proper position, the arms 8 and 9 are bent in opposite directions around the line-wire B, and this operation of bending the arms by the tool or implement serves to draw the wires so tightly together that they will be bent at their points of intersection, as indicated at C, and at the same operation the body portion 5 of the arms 8 9 will be securely attached or united to the wires A B. The groove or crease in the body portion 5 of the clamp serves to make the clamp engage

frictionally with one of the wires. The bending of the wires C at the point of intersection thereof operates to retain the wires in place and to limit or overcome any tendency of the clamp toward displacement, and the bending of the arms 8 9 in opposite directions around the wire B increases the security of attachment of the fastener to the wires. On the whole the employment of the clamp adds materially to the strength of the joint which is formed by the intersection of the wires and the application thereto of the clamp.

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

1. A sheet-metal blank for a crossing-wire clamp or fastener, comprising a body having integral wings on opposite sides, and the oppositely-extending arms projecting from diagonally opposite corners of the blank, the other two opposite corners of the blank having notches which correspond in form and area to said projecting arms, the major axis of the blank being in a line drawn diagonally across the body and said oppositely-extending arms.

2. A sheet-metal blank for a crossing-wire clamp or fastener, comprising a body having integral wings on opposite sides thereof, and arms extending in opposite directions from the respective upper and lower ends of the wings and projecting beyond diagonally opposite corners of the body, the major axis of the blank being in a line drawn diagonally across the body and said arms; said blank being inwardly slitted or cut from opposite corners of the body and in lines in continuation of the inner side edges of the projecting arms.

3. A crossing-wire clamp or fastener, comprising a longitudinally-creased body provided with wings extending from opposite sides thereof, and with bendable arms which are located on the opposite side edges of the respective wings and extend at right angles from the plane of the wings and the body, the end portions of said flat body projecting in opposite directions beyond and lying in the plane of the wings, said body having side edges which are unbroken except by the presence of the wings.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

GEORGE HENRY WRIGHT.

Witnesses:

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