

(No Model.)

W. P. ZIMMERMAN.
DEVICE FOR FASTENING CONDUCTORS.

No. 396,677.

Patented Jan. 22, 1889.

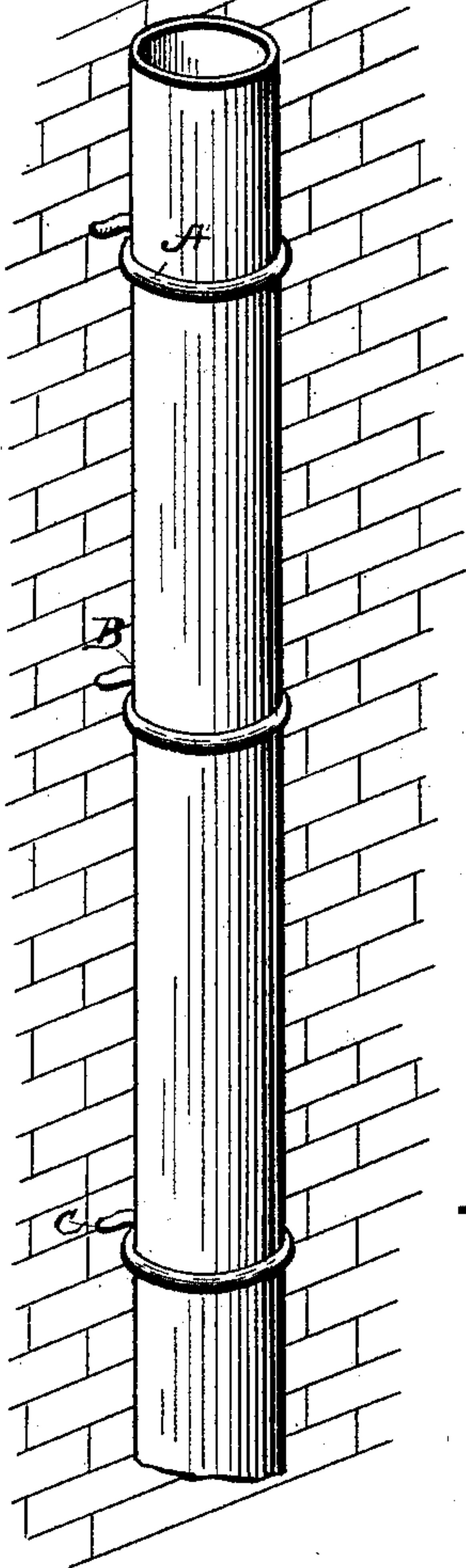


Fig. 1.

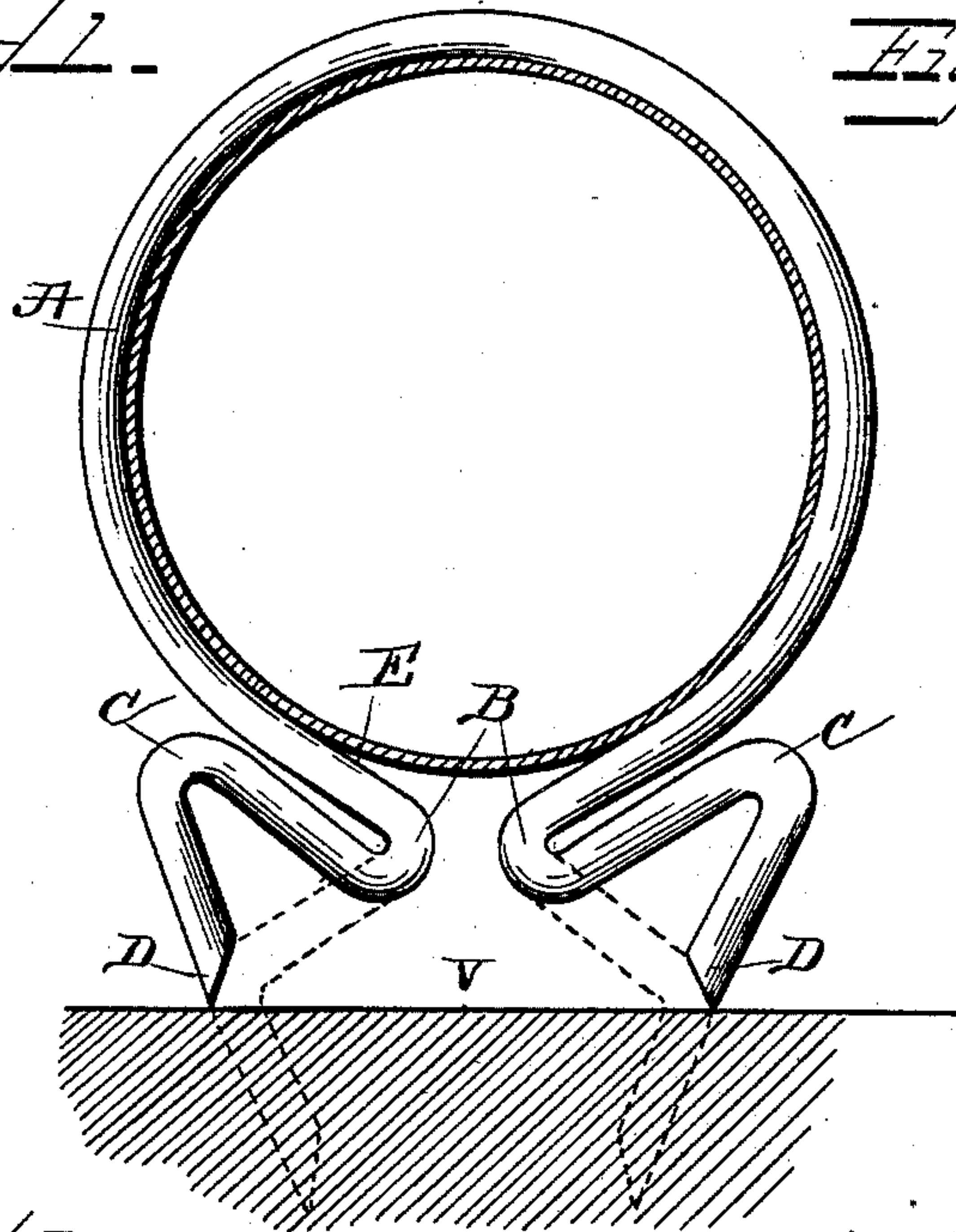


Fig. 2.

Fig. 3.

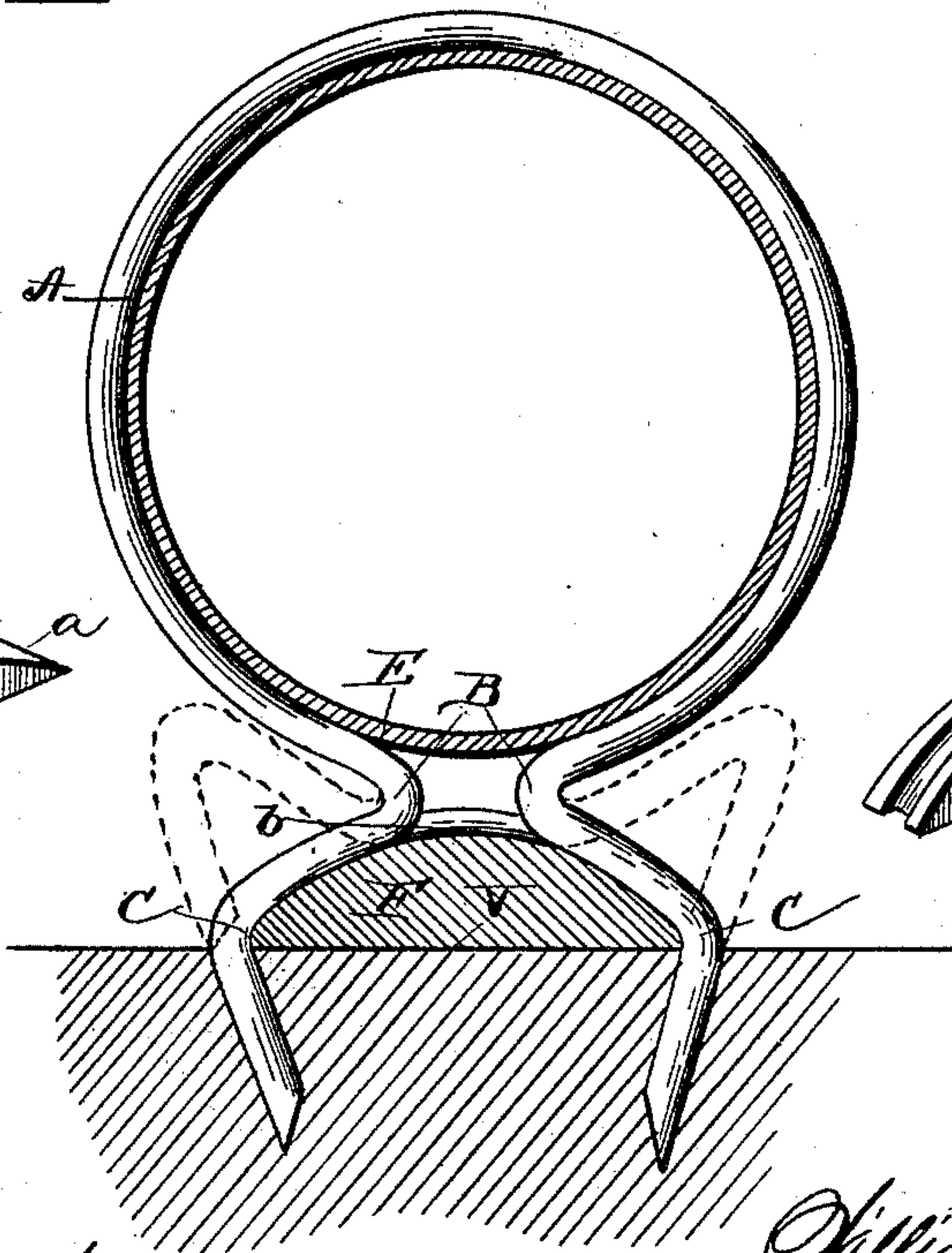


Fig. 4.

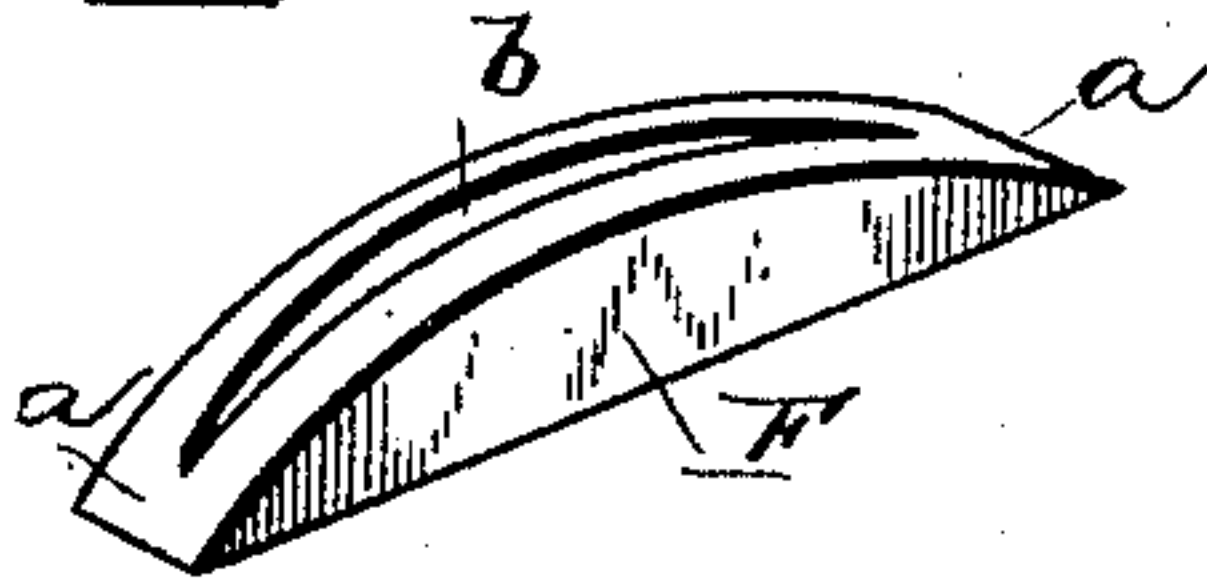
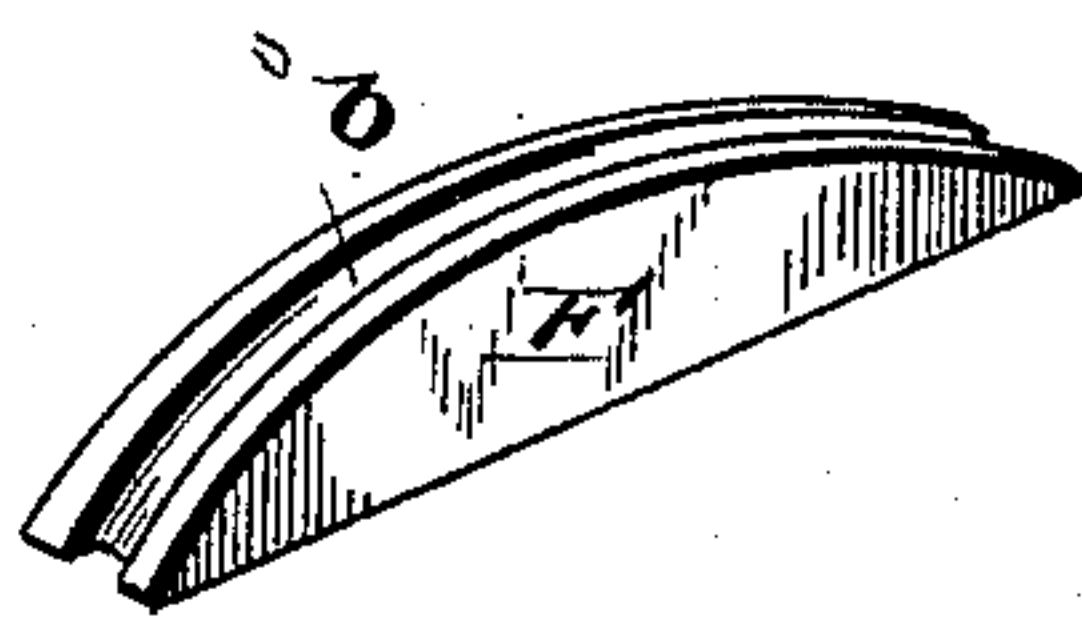


Fig. 5.



WITNESSES,

F. L. Ourand
Benj. E. Cowl.

Fig. 6.



INVENTOR,

William P. Zimmerman
by Louis Jagger & Co.
Attorneys.

UNITED STATES PATENT OFFICE.

WILLIAM PETER ZIMMERMAN, OF FREEPORT, ILLINOIS.

DEVICE FOR FASTENING CONDUCTORS.

SPECIFICATION forming part of Letters Patent No. 396,677, dated January 22, 1889.

Application filed May 7, 1888. Serial No. 273,073. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM PETER ZIMMERMAN, a citizen of the United States, and a resident of Freeport, in the county of Stephenson and State of Illinois, have invented certain new and useful Improvements in Devices for Fastening Conductors; and I do hereby declare that the following is a full, clear, and exact description of the invention, which will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, which form a part of this specification, and in which—

Figure 1 is a perspective view of a section of a conductor fastened to the wall by means of my improved device. Fig. 2 is a cross-section of the same, showing the fastening device as it appears before the points are driven into the wall. Fig. 3 is a similar view showing the device as it appears after the point has been driven in the wall and showing also the use of a peculiarly-constructed brace-block. Fig. 4 is a perspective view of this brace-block as when intended for temporary use only. Fig. 5 is a perspective view of this block as when intended for permanent use in conjunction with my device, and Fig. 6 is a cross-section of this block.

Like letters of reference denote corresponding parts in all the figures.

My invention has relation to devices for fastening conductors upon the walls of buildings; and it consists in the improved construction and arrangement of the fastening device, made of wire, which will be hereinafter more fully described and claimed.

Reference being had to the accompanying drawings, the letter A designates a wire loop of such a size and shape that it will fit closely around the conductor, so as to clamp the same firmly. In the example of the drawings I have shown a conductor of the usual cylindrical form; but it is obvious that it may be of any other shape, if desired, the wire loop A being made of a corresponding shape, so as to bind closely against the conductor on all sides. Where the ends of this loop come together, at the points marked B B on the drawings, the wire is doubled upon itself, and then again bent to form shoulders C C, the ends of the wire being pointed, as shown at D D, to

permit of their being driven readily into the wall W.

In bending the free ends of the wire to form the shoulders C and pointed ends D care should be taken to make the bend C at such an angle that a point midway between the two inner ends, B B, will be the same distance in a straight line from the point V on the wall at the beginning of driving the pointed ends of the wire into the wall as when the wires have been driven entirely into the wood, as indicated by dotted lines in Fig. 2 and in full lines in Fig. 3. In other words, during the process of driving the pointed ends of the wire into the wall the distance between B B and the wall will remain unchanged.

In order to facilitate the driving of the pointed wires into the wood, which is done by hammering upon the shoulders C C with a hammer or mallet, I may employ, either temporarily or permanently, a block, F, made of cast-iron or other suitable material, and made flat on one side where it rests against the wall and rounded on the outside where it bears against the wire. If this block is to be used only temporarily during the process of attaching the fastening upon the wall, but is to be again removed after this has been done, I make the ends of the block smooth, as shown at *a a* in Fig. 4, and provide the block on its outer curved face with the groove *b*, extending between the smooth parts *a a*; but when it is the intention to leave this block as a permanent brace, which may be desirable in fastening conductors of large size, the groove *b* extends from end to end, as shown in Fig. 5, and as the wire rests in this groove after the points have been driven home it will be seen that the block cannot be displaced. On the other hand, by constructing the block with smooth ends it may readily be removed after the pointed ends of the wire have been driven home.

By this peculiar construction of my improved fastener, whether used in conjunction with or without the brace-block, it will be seen that the operation of driving the pointed ends D of the wire into the wall not only serves to fasten the device in the wall, but by the same operation the bends B B are pressed inwardly, so as to hug or clamp the conductor (shown

at E) closely in such a manner as to practically prevent vertical displacement.

Having thus described my invention, I claim and desire to secure by Letters Patent of the United States—

1. As an improved article of manufacture, the herein-described device for holding and fastening conductors, &c., the same consisting of a section of wire bent into the shape shown in the drawings—that is to say, so as to form a loop adapted to fit closely around the conductor, the inner meeting ends of this loop being doubled to form shoulders B B, and then again doubled to form the outer shoulders, C C, terminating in pointed ends D D,

substantially as and for the purpose shown and set forth.

2. The combination, with the device for holding and fastening conductors herein shown and described, of the grooved brace-block F, substantially as and for the purpose shown and set forth.

In testimony that I claim the foregoing as my own I have hereunto affixed my signature in presence of two witnesses.

WILLIAM PETER ZIMMERMAN.

Witnesses:

DAVID STEUSSY,
J. H. STEARNS.