

(No Model.)

D. L. SMITH.
SUSPENDER BUCKLE.

No. 370,660.

Patented Sept. 27, 1887.

Fig. 1

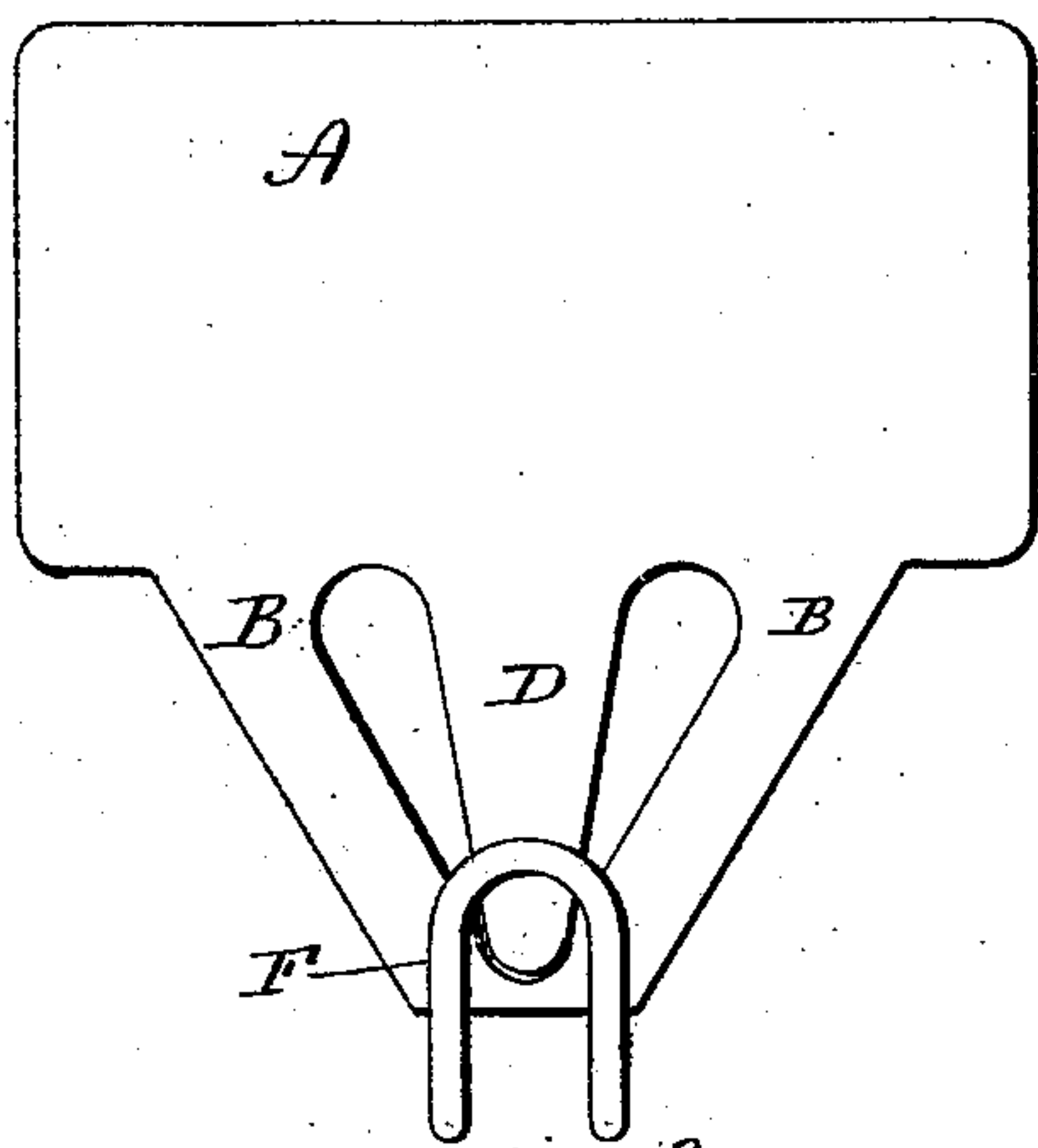


Fig. 2

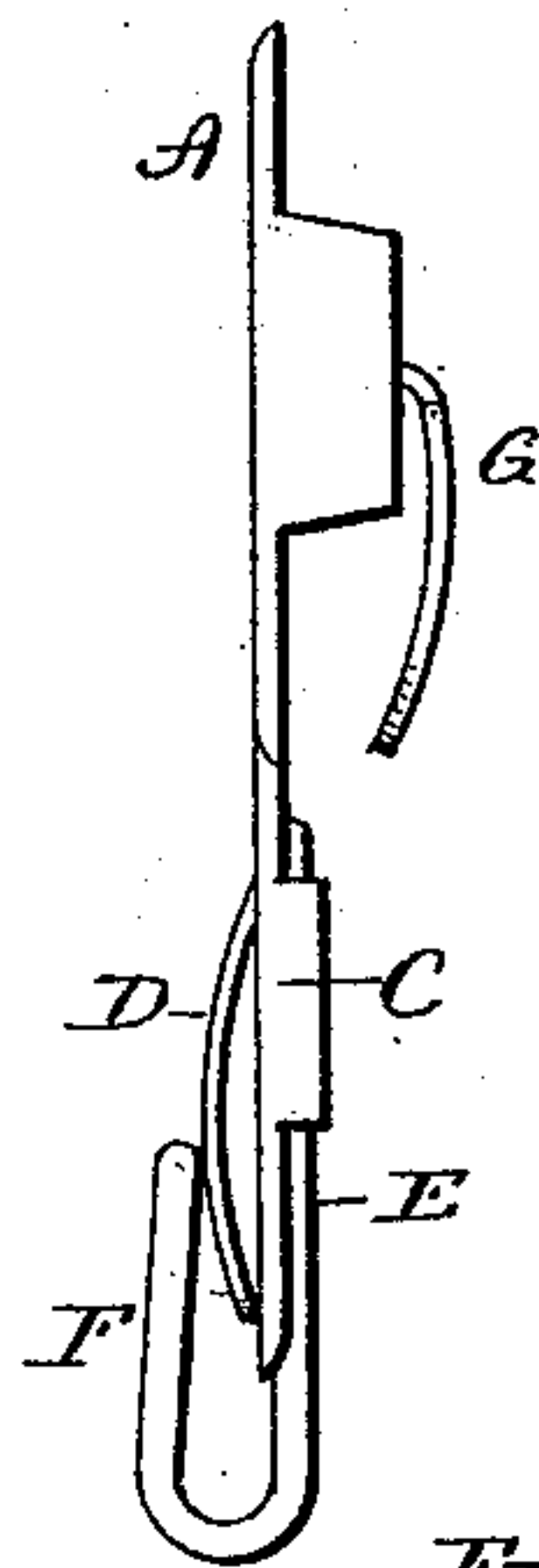


Fig. 3

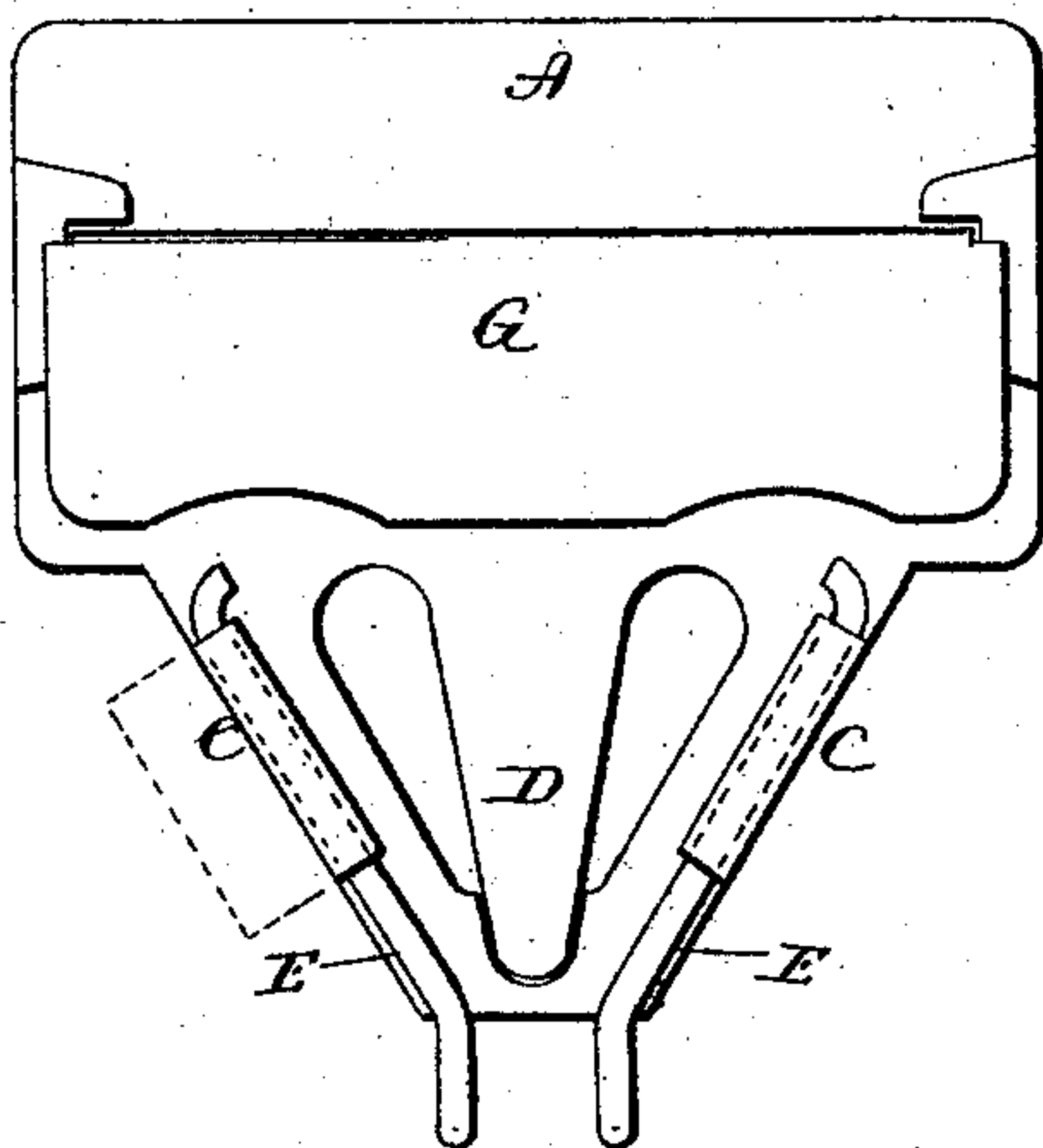


Fig. 4

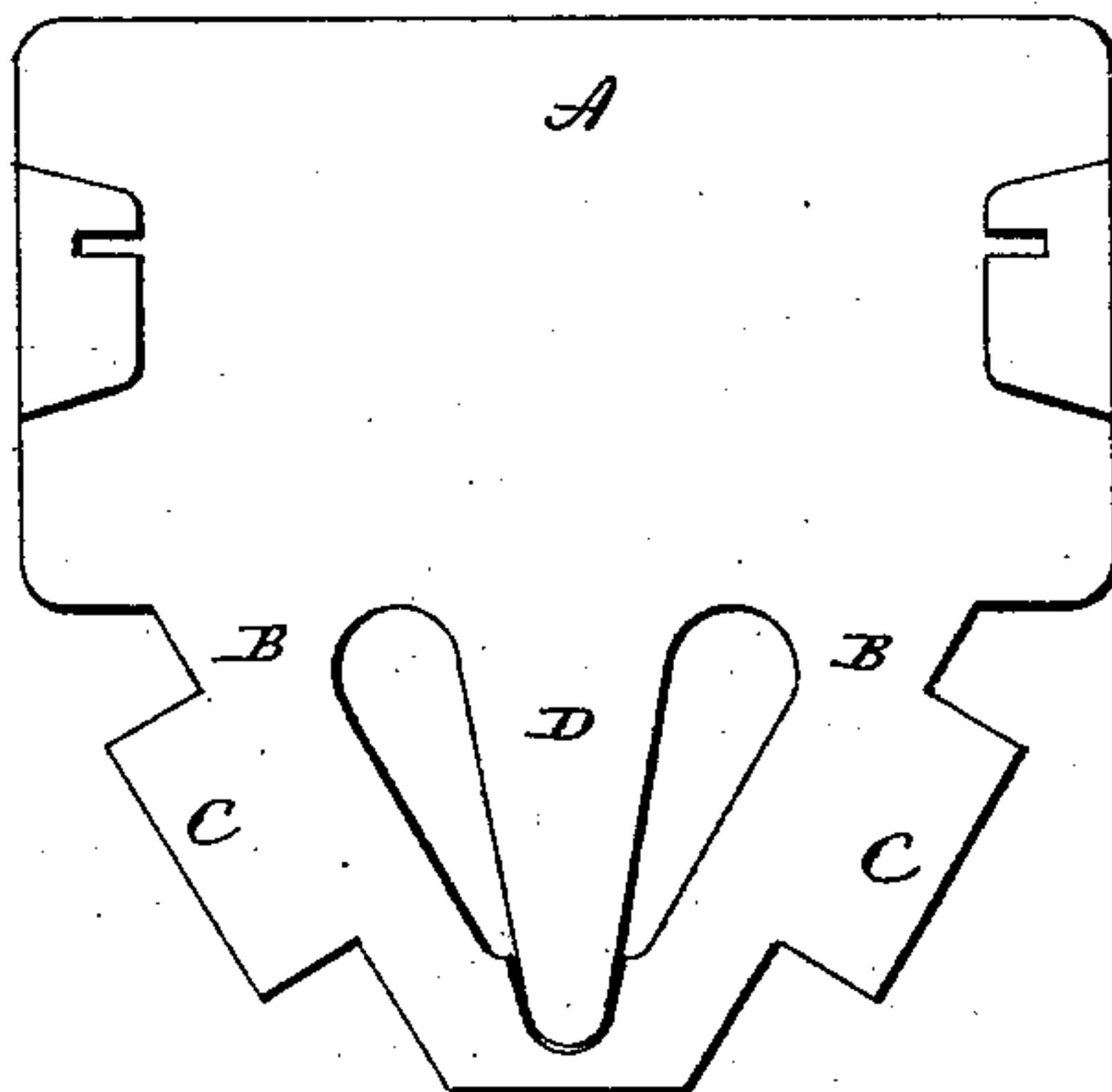


Fig. 5

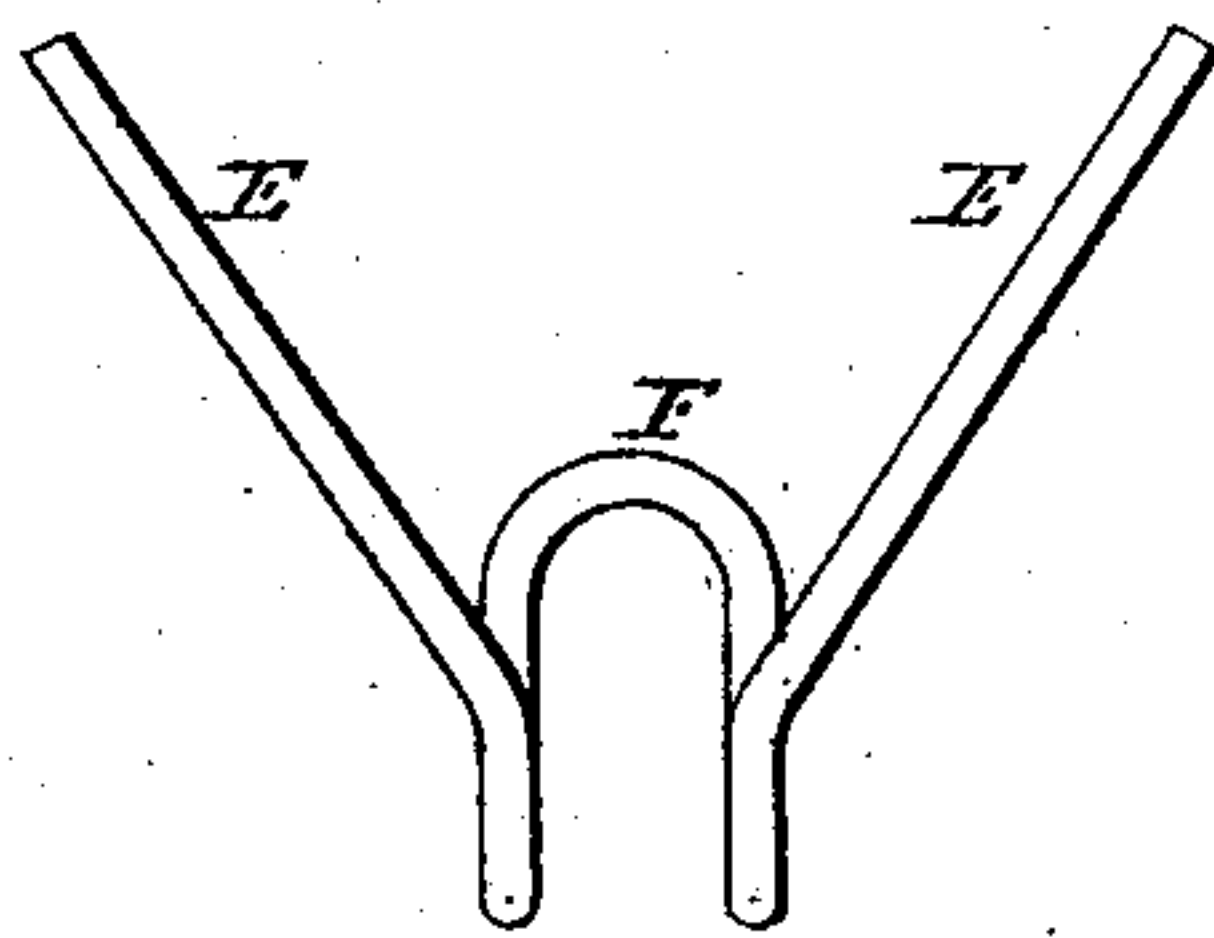
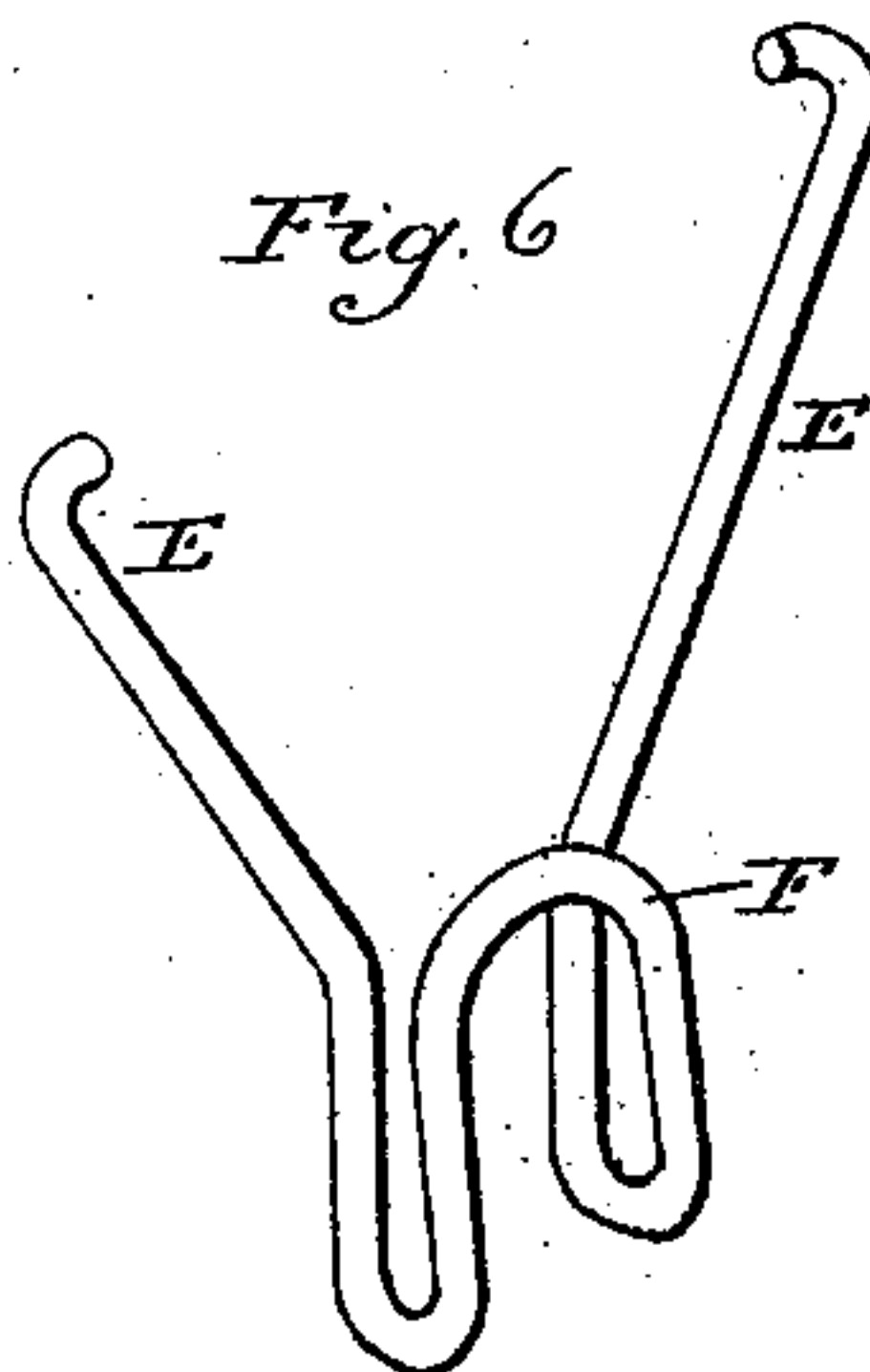


Fig. 6



Witnesses
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UNITED STATES PATENT OFFICE.

DWIGHT L. SMITH, OF WATERBURY, CONNECTICUT, ASSIGNOR OF ONE-HALF
TO EARL A. SMITH, OF SAME PLACE.

SUSPENDER-BUCKLE.

SPECIFICATION forming part of Letters Patent No. 370,660, dated September 27, 1887.

Application filed August 15, 1887. Serial No. 246,948. (No model.)

To all whom it may concern:

Be it known that I, DWIGHT L. SMITH, of Waterbury, in the county of New Haven and State of Connecticut, have invented a new Improvement in Suspender-Buckles; and I do hereby declare the following, when taken in connection with accompanying drawings and the letters of reference marked thereon, to be a full, clear, and exact description of the same, and which said drawings constitute part of this specification, and represent, in—

Figure 1, a front view of the buckle complete; Fig. 2, an edge view of the same; Fig. 3, a rear view; Fig. 4, the plate, showing sides of the extension formed for inclosing the sides of the hook. Fig. 5 illustrates the method of bending the hook. Fig. 6 shows the hook completely formed ready for attachment.

This invention relates to an improvement in that class of suspender-buckles in which the buckle-frame is in the form of a sheet-metal plate provided with a clamping-lever, between which and the plate the suspender passes, the lower edge of the plate provided with a hook as a means for engaging the braces, my invention relating particularly to the formation of the hook upon the lower edge of the plate.

In this class of buckles as usually constructed the hook has been made an integral part of the plate by making an extension on the lower edge of the plate and turning it back upon itself into hook shape. The strength of the hook is limited to the thickness of the metal from which the plate is made, and unless the metal be thicker than it is practicable to make the buckle-frame the hook is so weak that it is liable to be bent out of shape, and in any case where the hook is made an integral part of the sheet-metal frame the metal must be thicker than is actually necessary for the frame itself, in order that the hook may have sufficient strength.

The object of my invention is to make the hook of this class of buckles from wire, whereby a lighter metal may be used for the frame than in the usual construction, and the hook be very much stronger than when the hook is made as an integral part of the sheet-metal plate.

A represents the frame of the buckle, which is in the form of a plate. From its lower edge is a downward extension, B, formed as an integral part thereof. This diminishes in width substantially as when the hook is formed as an integral part of said extension; but the length of the extension is shorter than when the hook is to be so formed as a part of the extension. On each side of the extension B is a laterally-projecting wing, C. (See Fig. 4.) In the formation of this extension B the usual spring-tongue, D, is preferably formed therein. The hook is made from wire doubled into substantially Y shape, as seen in Fig. 5, the inclination of the two sides E E of the Y corresponding to the inclination of the two sides of the extension B of the buckle-frame. The leg of the Y is bent over upon itself to form the hook F, as seen in Fig. 6. The extreme ends of the two sides of the Y are turned inward. This Y-shaped hook is laid upon the extension B, the two sides E E near the edges of the extension B, and then the two wings C turned inward, and so as to close upon the two sides E E of the Y, as seen in Fig. 3, so that the two sides of the extension are practically closed by the two sides of the Y. The turned-in ends of the sides of the Y extend over the ends of the inclosing portion C of the extension and form a support to prevent the possibility of the Y being drawn from its place. The hook F extends upward in front of the extension B of the spring D in the usual manner for this class of buckles. By this construction the sides E of the wire hook greatly strengthen the downward extension from the frame of the hook, and the hook itself is very much stronger than it is possible to make it when an integral part of the plate itself.

The turning in of the ends of the sides E of the wire hook may be omitted, as the closing of the sides C of the extension over the diverging sides of the wire hook may be sufficient to retain the hook in place; yet I prefer to turn the ends inward as I have described, as giving more ample protection.

The frame of the buckle is provided with the usual lever, G, upon its back, which it is unnecessary to describe; but it will be understood that any of the known securing devices

combined with a plate or sheet-metal frame may be employed.

I claim—

5 The herein-described buckle, consisting of the sheet-metal frame A, constructed with a downward extension, B, therefrom, combined with a hook made from wire doubled into Y shape, the leg of the Y turned upon itself to

form the hook, the sides of the said extension from the frame closed over the sides of the Y 10 to secure the hook to the frame, substantially as described.

DWIGHT L. SMITH.

Witnesses:

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