

(No Model.)

E. H. MIDDLETON.  
PAPER FASTENER.

No. 361,439.

Patented Apr. 19, 1887.

FIG. 1

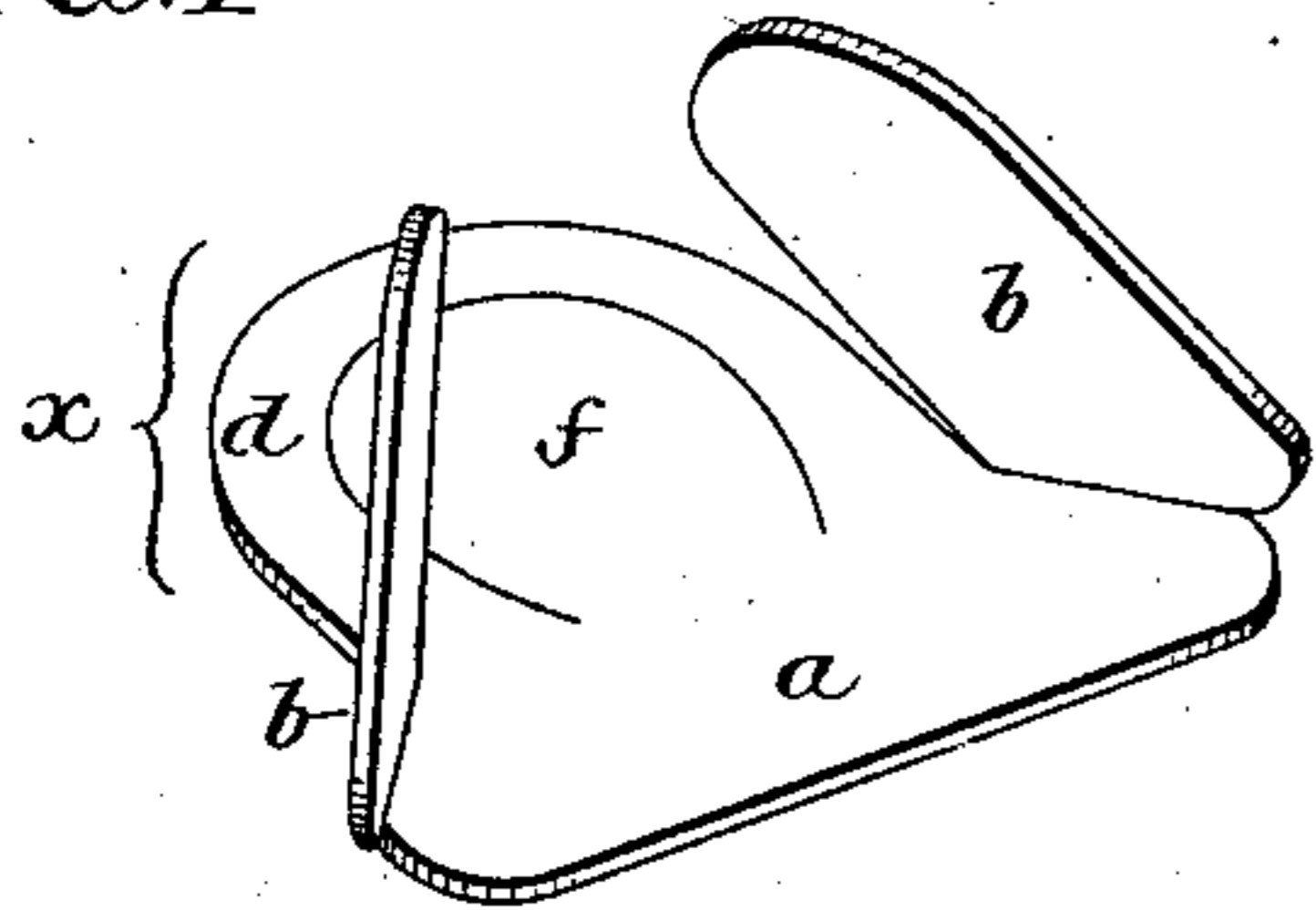


FIG. 2

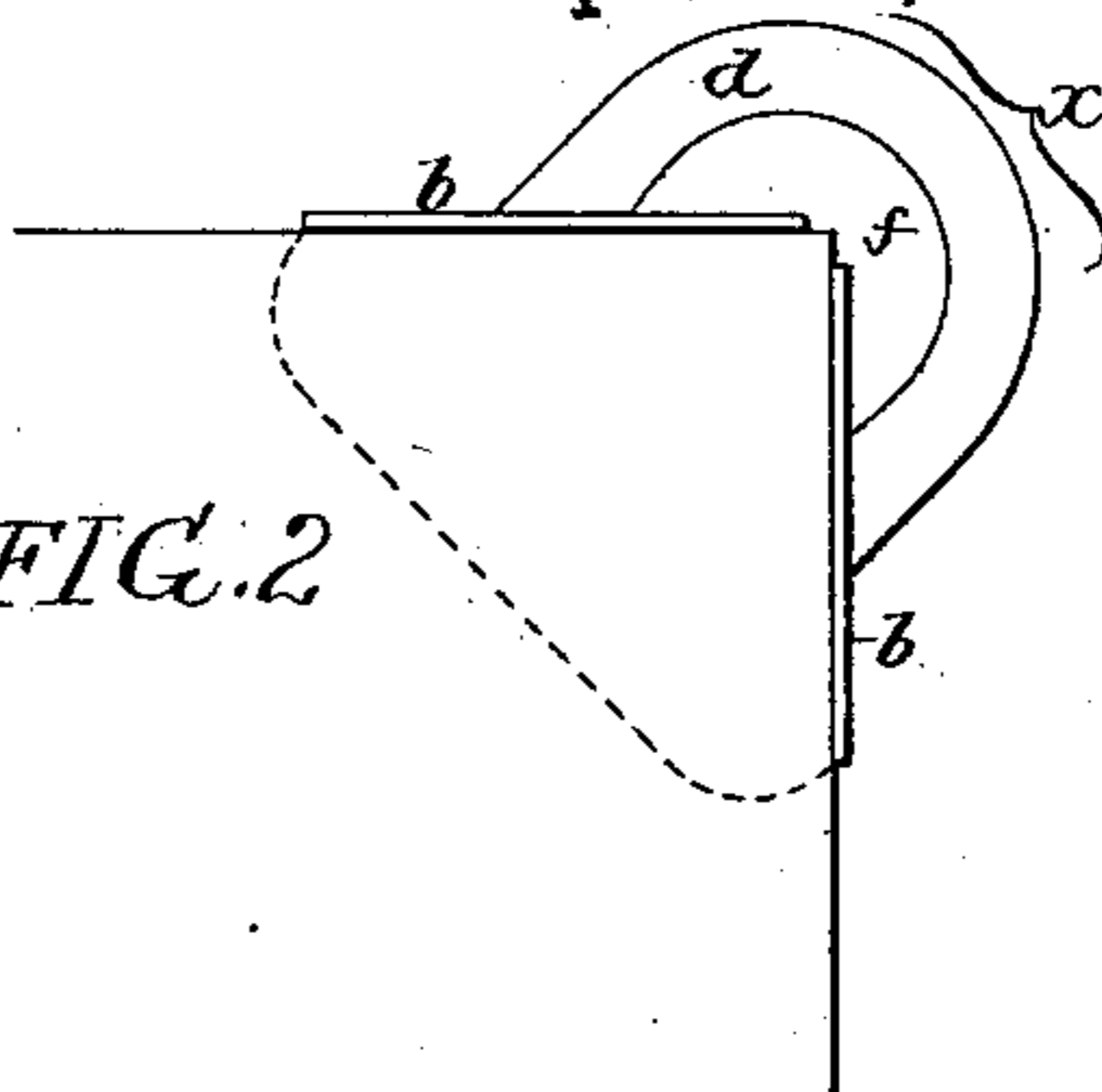


FIG. 4

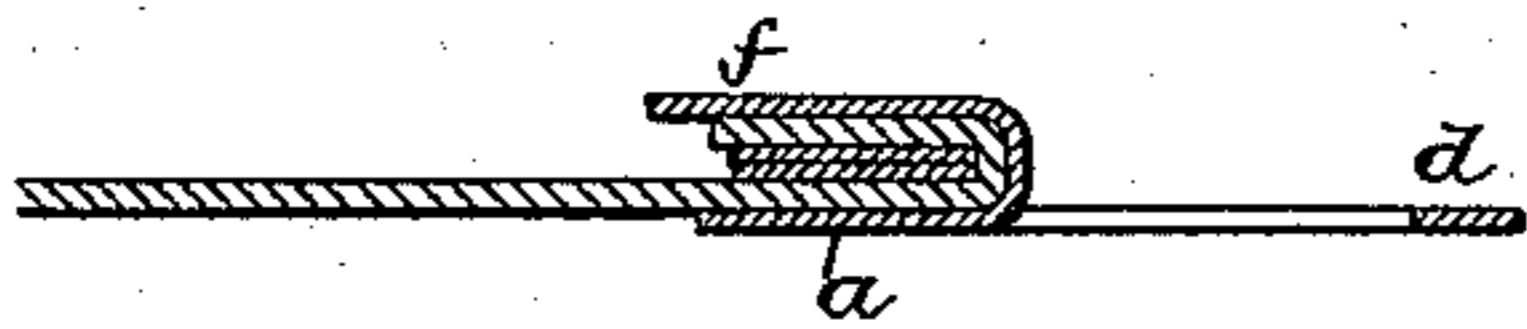


FIG. 3

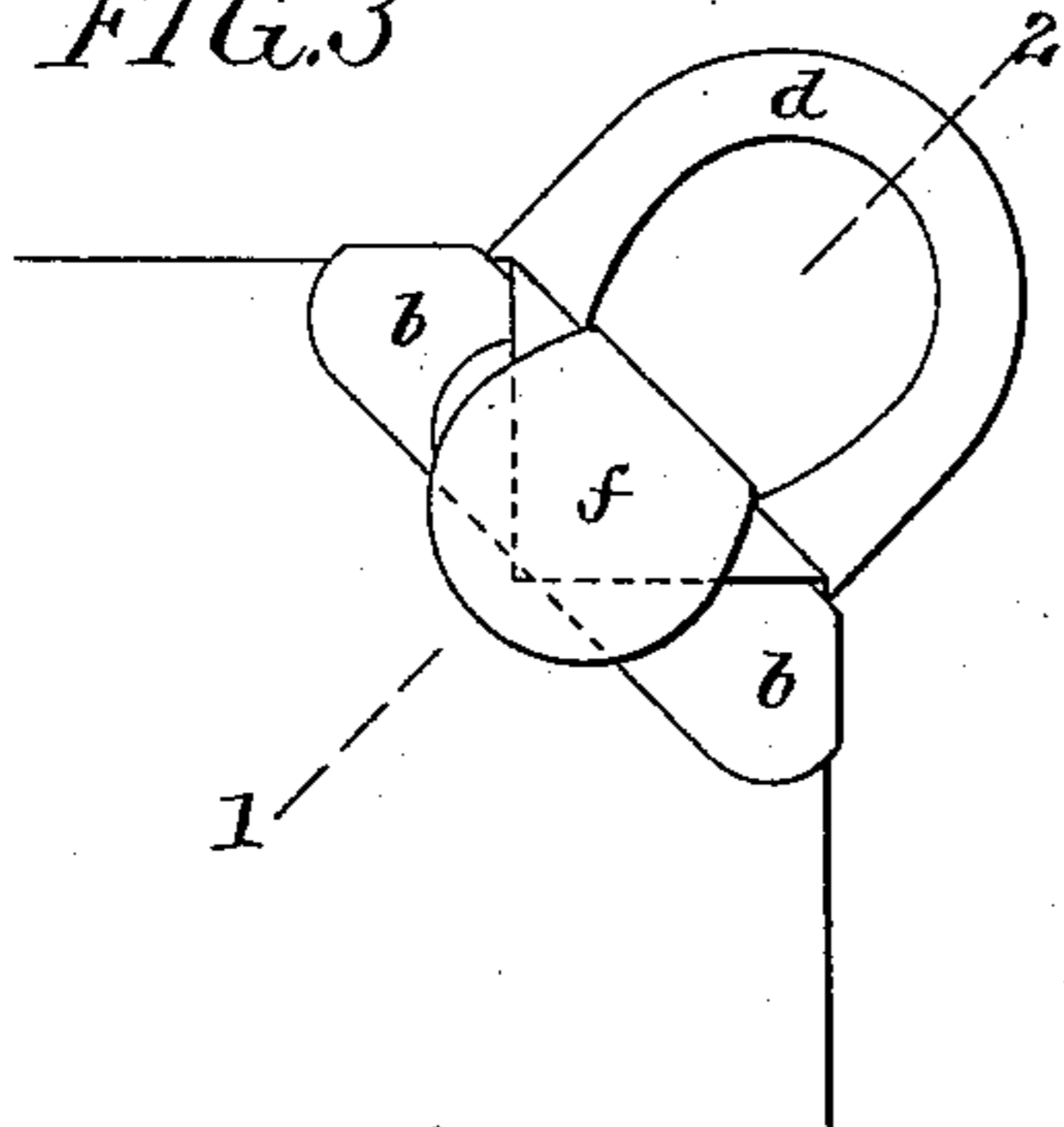


FIG. 5

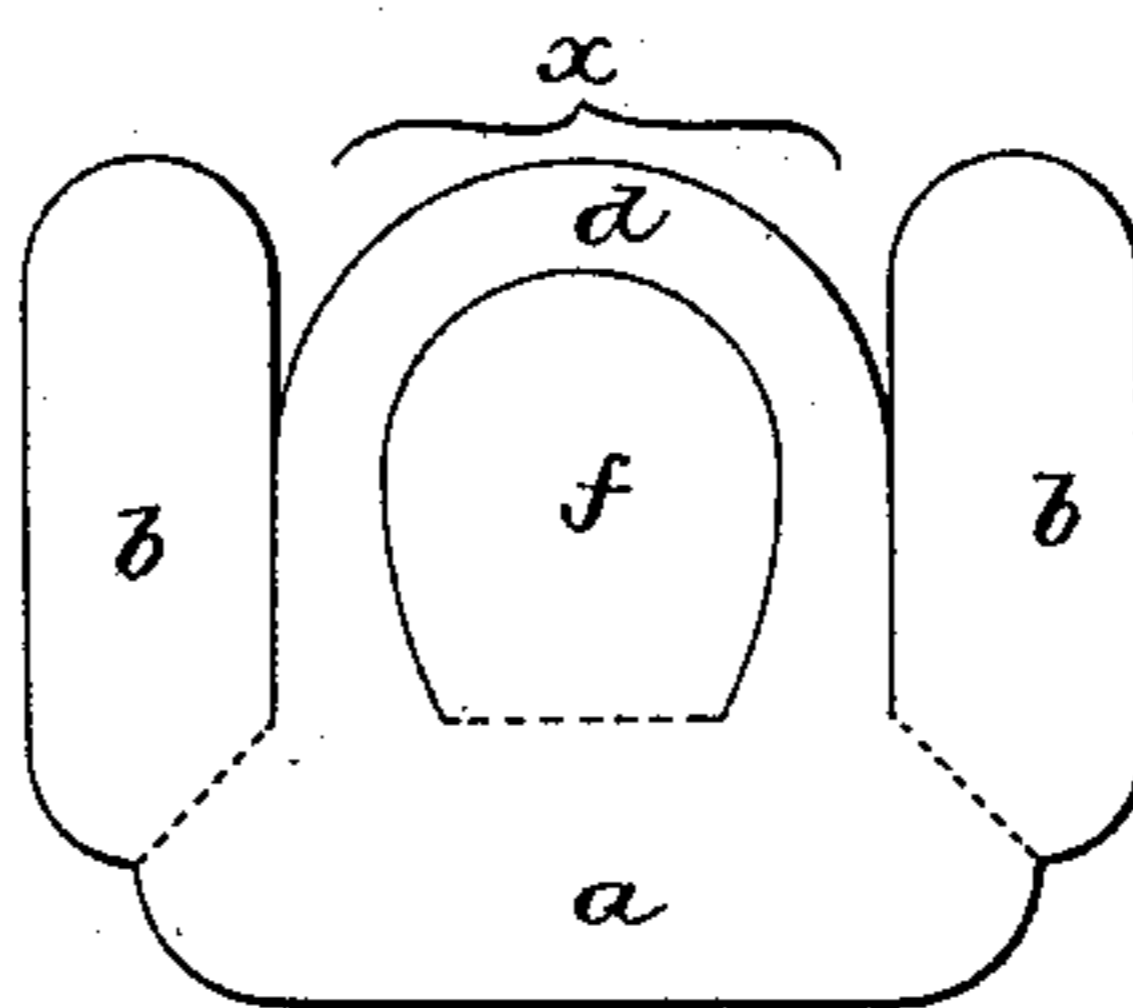


FIG. 6

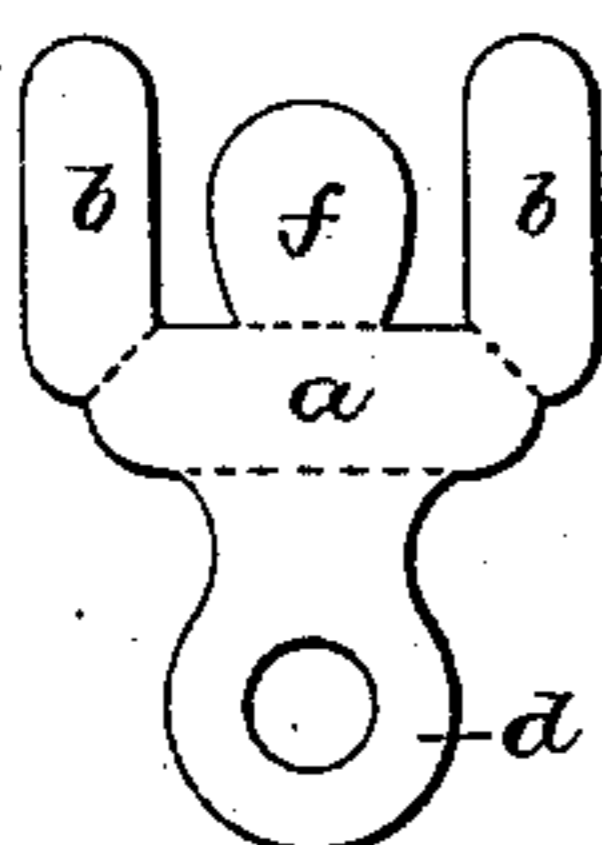


FIG. 7

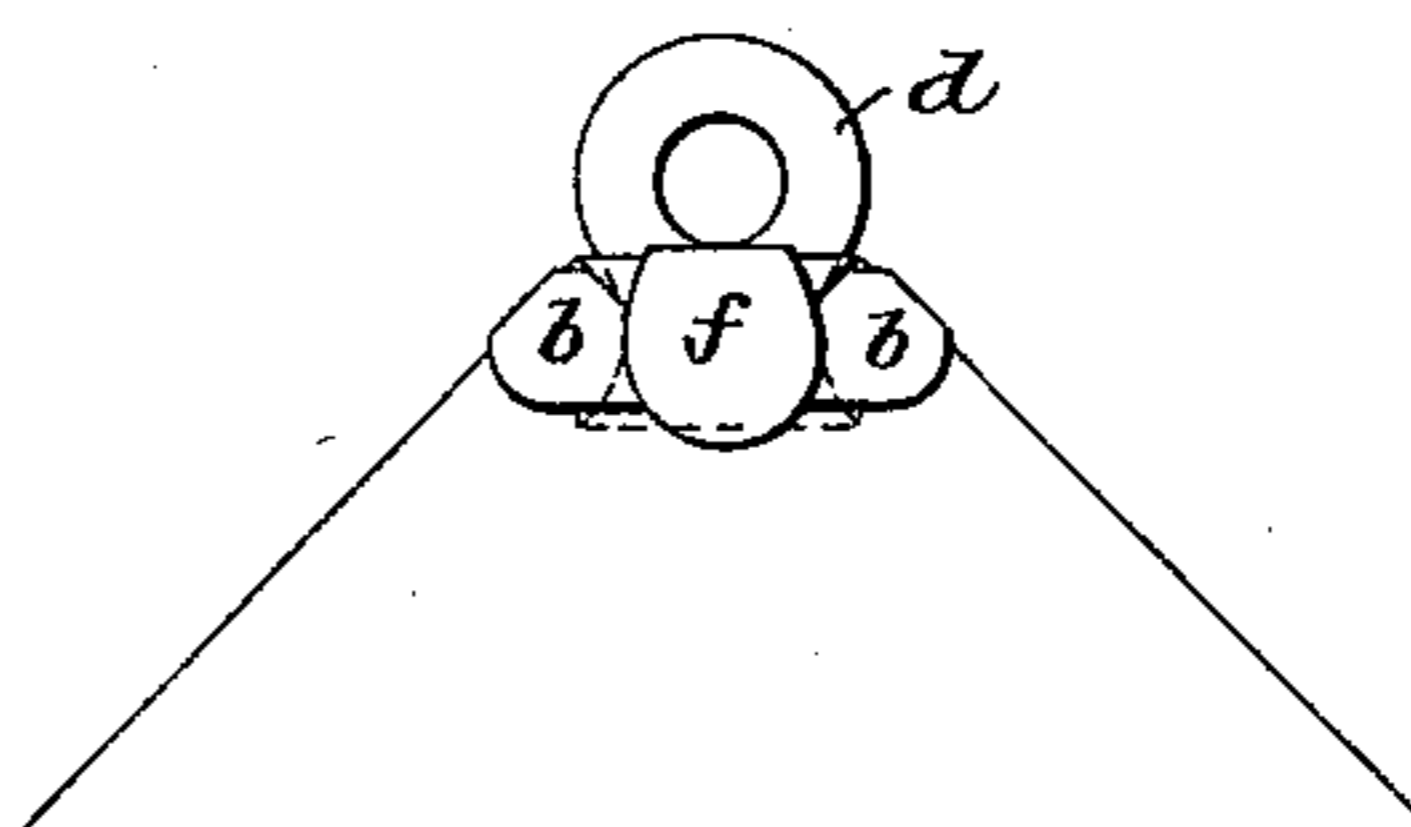


FIG. 8

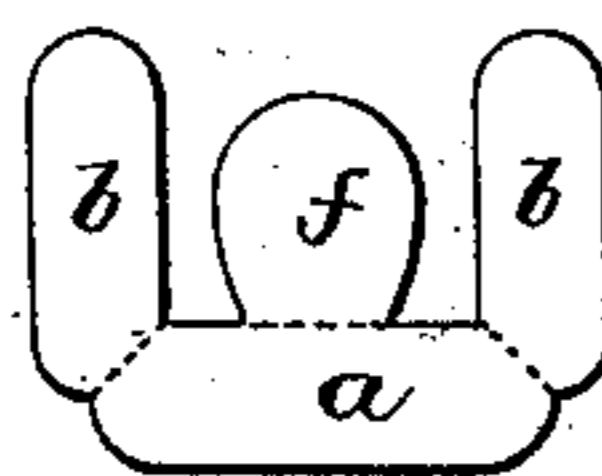


FIG. 9

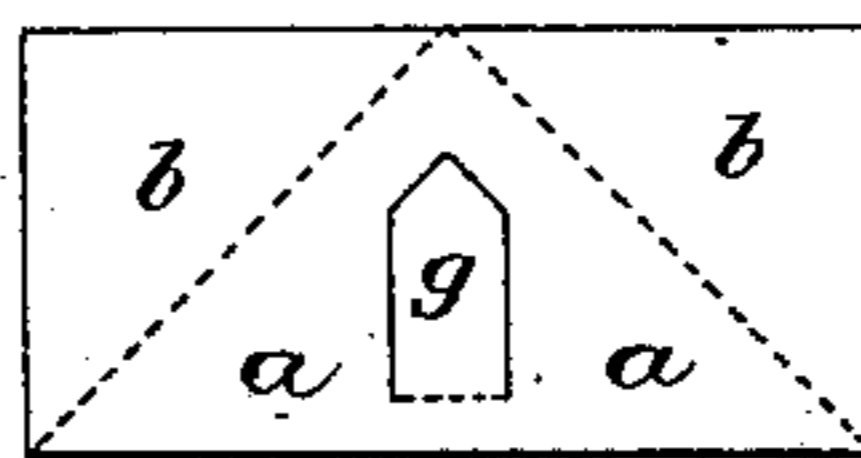
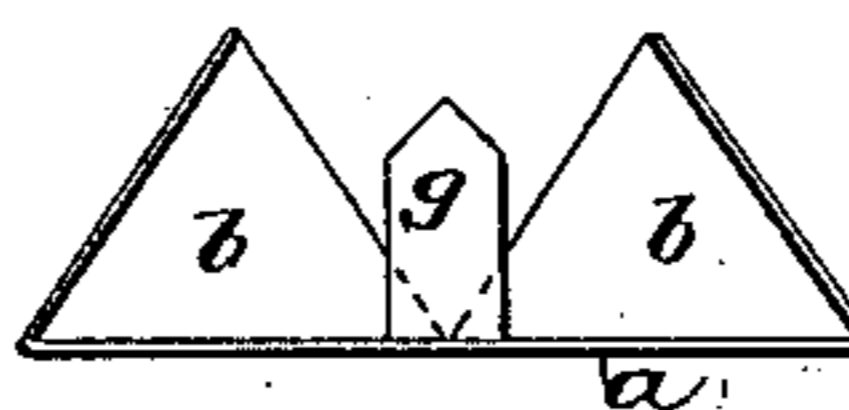


FIG. 10



FIG. 11



Witnesses  
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# UNITED STATES PATENT OFFICE.

ETHELBERT H. MIDDLETON, OF PHILADELPHIA, PENNSYLVANIA.

## PAPER-FASTENER.

SPECIFICATION forming part of Letters Patent No. 361,439 dated April 19, 1887.

Application filed February 17, 1887. Serial No. 227,871. (No model.)

*To all whom it may concern:*

Be it known that I, ETHELBERT H. MIDDLETON, a citizen of the United States, and a resident of Philadelphia, Pennsylvania, have  
5 invented certain Improvements in Paper-Fasteners, of which the following is a specification.

The object of my invention is to construct a clasp for securely retaining at one or more corners a number of sheets of paper or like material. This object I attain in the manner  
10 hereinafter set forth, reference being had to the accompanying drawings, in which—

Figure 1 is a perspective view of a clasp or retainer constructed in accordance with my invention. Fig. 2 is a plan view of the same,  
15 showing the sheets of paper applied to the clasp before the retaining-arms of the latter are bent down. Fig. 3 is a view showing the clasp with its retaining-arms bent down. Fig. 4 is  
20 a sectional view on the line 1 2, Fig. 3. Fig. 5 is a view showing the blank for the clasp before the bending of any of the arms of the same, and Figs. 6 to 11 are views illustrating  
25 modified forms of the clasp. Figs. 1 to 5 are on an enlarged scale.

The clasp shown in Fig. 1 consists of a bar, *a*, having at each end a projecting wing, *b*, which is bent up on a line at an angle of forty-five degrees to the longitudinal line of the bar,  
30 so that the inner faces of the two wings are at right angles to each other. On one side of the bar is a projection, *x*, in which is a segmental incision, whereby the projection is caused to form an outer suspension-eye, *d*, and an internal wing, *f*.  
35

In applying the clasp to a series of sheets of paper or like material said clasp is adjusted to the corner of the mass until the opposite wings, *b*, bear upon the side and end of the same, as  
40 shown in Fig. 2. These wings are then folded down so as to confine the mass of papers to the back bar, *a*, and the wing *f* is then folded over the wings *b*, and with it is folded over the corner of the mass of papers to be confined by the clasp, as seen in Figs. 3 and 4. The folding over of these corners with the wing *f* effectually secures the clasp in position on the  
45 mass of papers without any puncturing or

cutting of the papers themselves, the eye *d* providing a ready means of suspending the 50 mass of papers.

The papers may be removed by simply bending back the wings *f* and *b*, or any paper of the series can be withdrawn without disturbing the others.

If desired, the suspension-eye *d* may be 55 formed by means of a plate projecting from the bar *a* on the side opposite that from which the wing *f* projects, as shown in Fig. 6, this projection being folded upward back of the bar *a*, as shown in Fig. 7, to bring the eye into proper position. The plan of forming the eye shown in Figs. 1 to 5 is preferred, however, as  
60 it does not involve the same waste of material as the construction shown in Figs. 6 and 7.

The formation of the suspension-eye may be omitted altogether, if desired, as in the fastener shown in Fig. 8, and for ordinary uses where a suspension-eye is not required this latter form will generally be adopted. In cases 70 where the puncturing of the paper is not an objection a wing, *g*, may be struck up from the body of the bar *a*, and may be used in addition to the wing *f* or in place thereof. (See Figs. 9, 10, and 11.)  
75

I claim as my invention—

1. The within-described clasp or fastener, consisting of a back bar, two wings at right angles to each other serving as gages for the corner portions of the sheets to be fastened, 80 and a wing engaging with the sheets and retaining the clasp in place thereon, all substantially as specified.

2. The combination of the back bar, the gage-wings at right angles to each other, and 85 the end wing bearing such relation to the gage-wings that the corners of the sheets will be turned with said end wing as it is folded over, all substantially as specified.

In testimony whereof I have signed my name 90 to this specification in the presence of two subscribing witnesses.

ETHELBERT H. MIDDLETON.

Witnesses:

WILLIAM D. CONNER,  
HARRY SMITH.