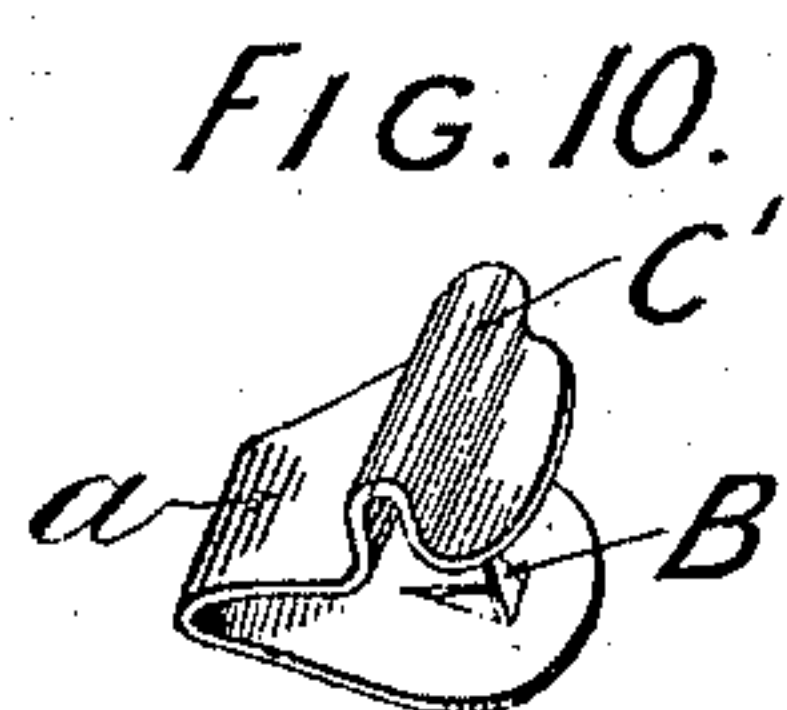
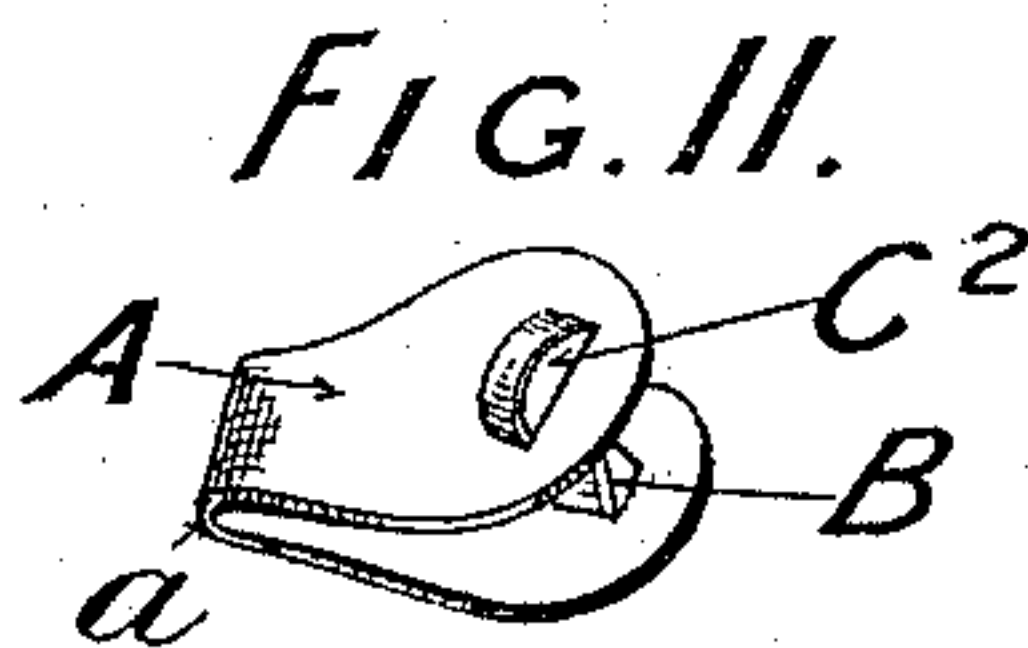
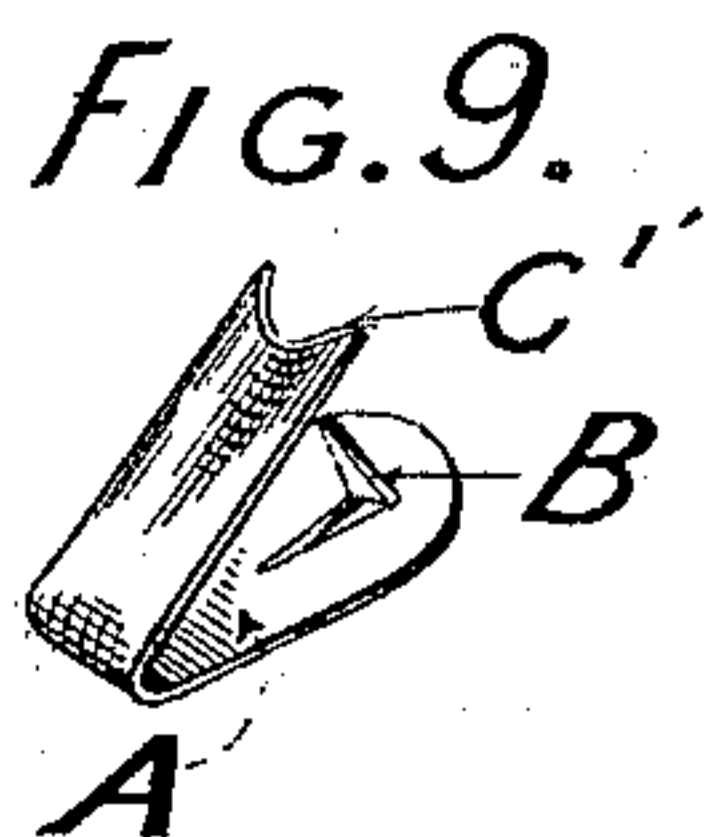
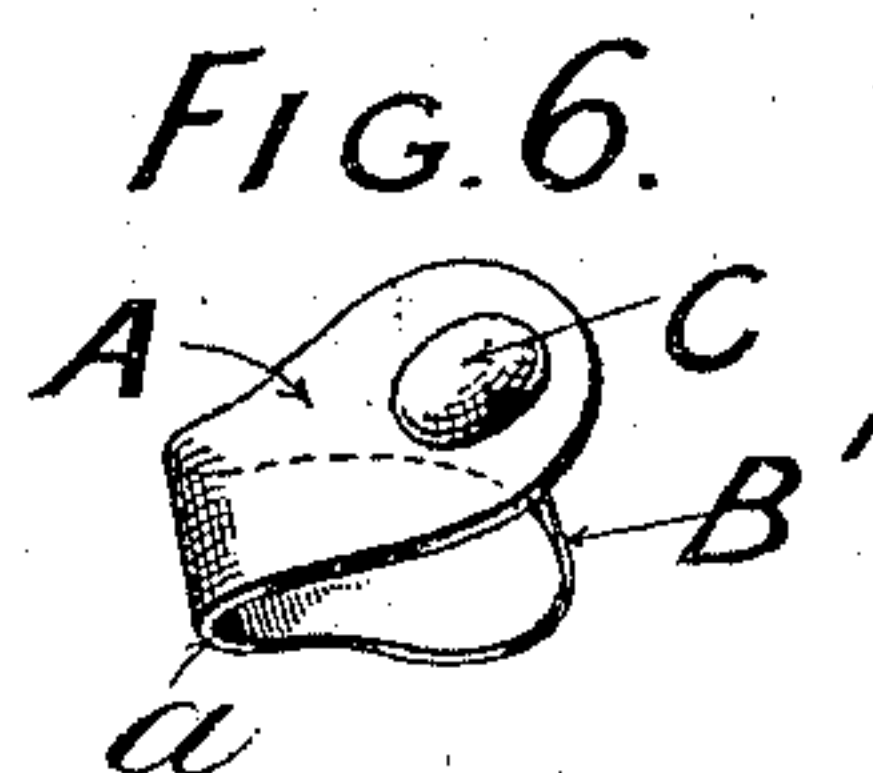
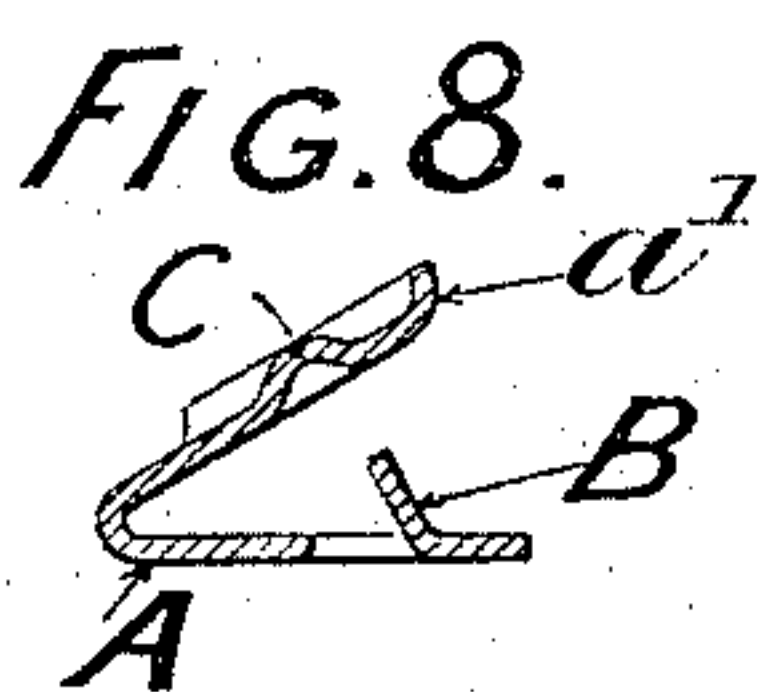
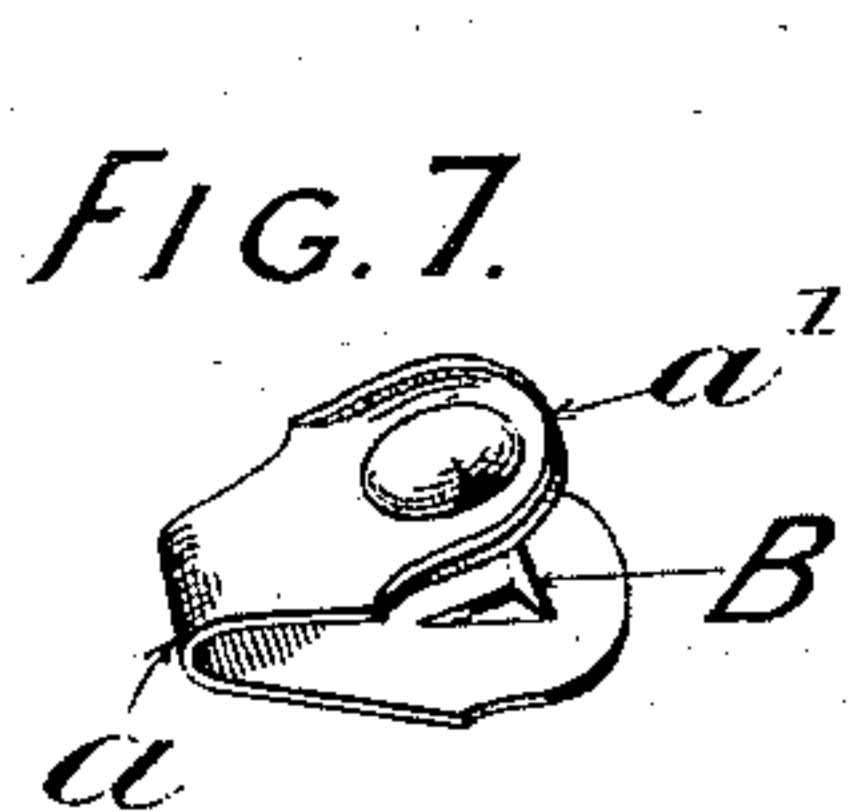
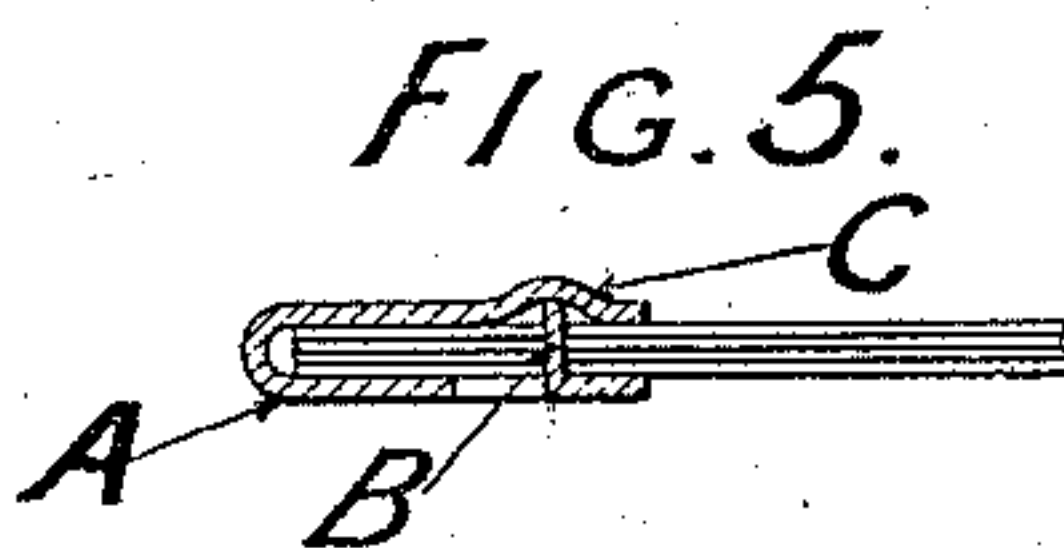
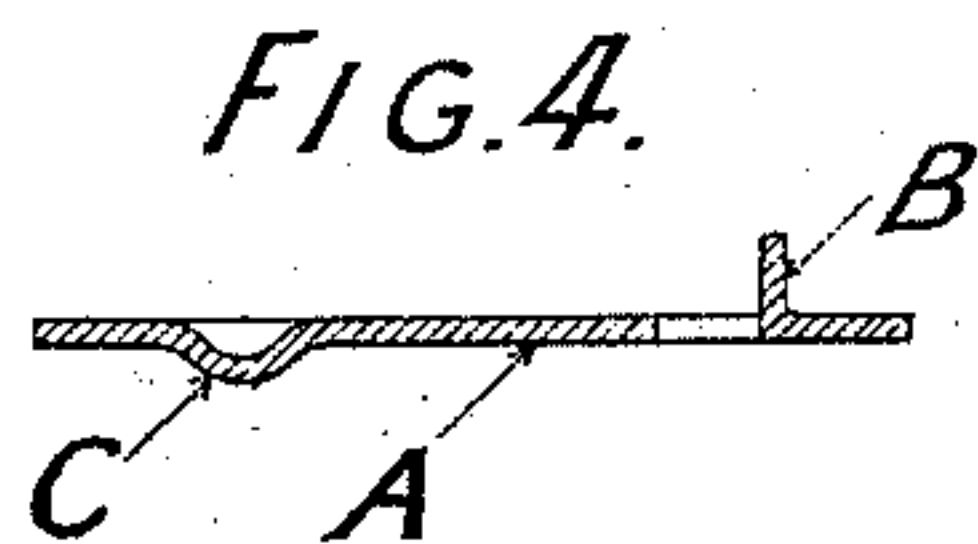
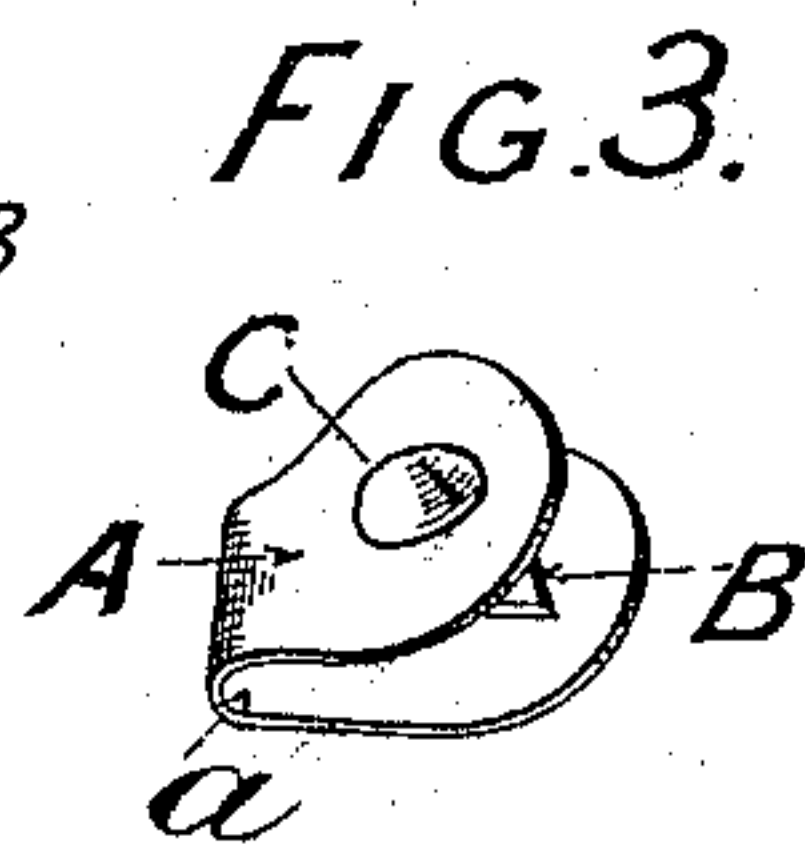
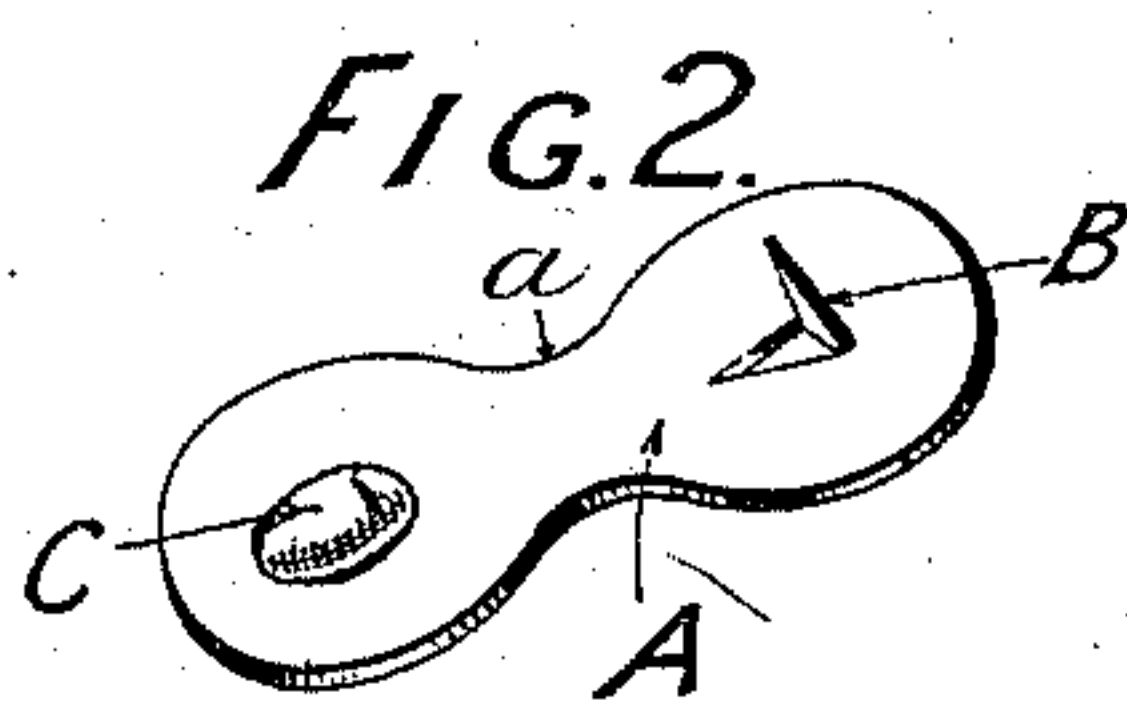
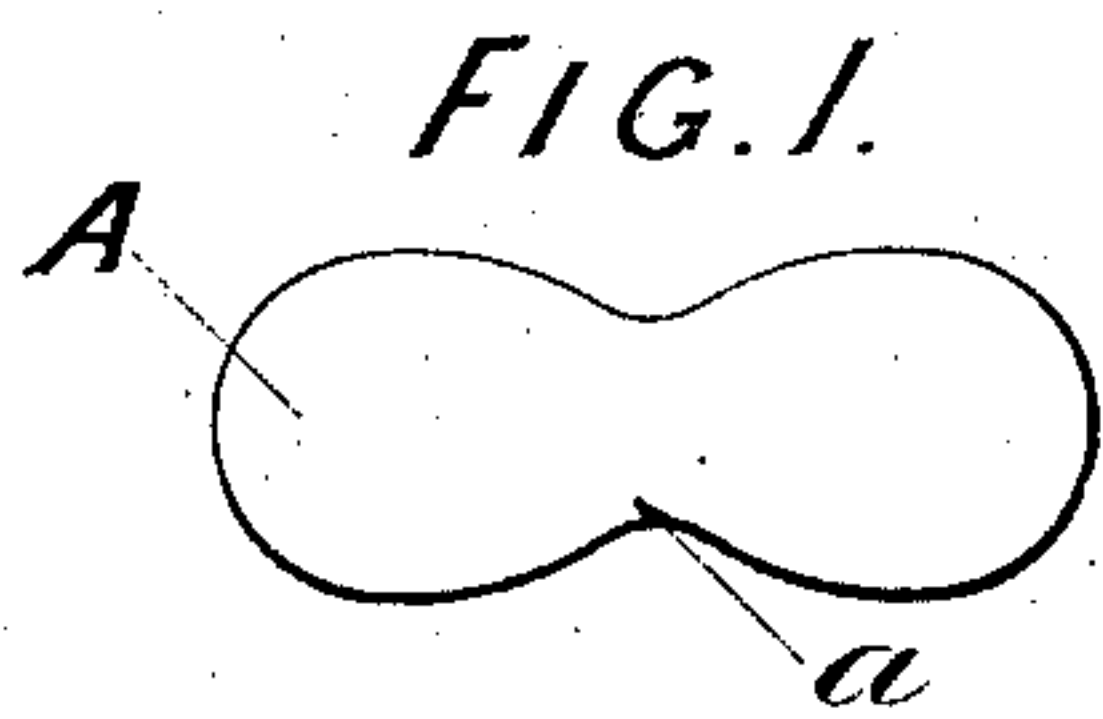


(No Model.)

S. H. CROCKER.  
PAPER FASTENER.

No. 547,335.

Patented Oct. 1, 1895.



WITNESSES

Frank William Pattison  
Edmund James Wood

INVENTOR.

Samuel Henry Crocker  
per George Henry Payner  
Attorney



# UNITED STATES PATENT OFFICE.

SAMUEL HENRY CROCKER, OF LONDON, ENGLAND.

## PAPER-FASTENER.

SPECIFICATION forming part of Letters Patent No. 547,335, dated October 1, 1895.

Application filed June 16, 1894. Serial No. 514,783. (No model.)

*To all whom it may concern:*

Be it known that I, SAMUEL HENRY CROCKER, engineer, a subject of the Queen of Great Britain and Ireland, residing at 172 Fleet Street, London, E. C., England, have invented certain new and useful Improvements in Paper-Fasteners, of which the following is a specification.

This invention relates to an improved paper-fastener for securing a number of papers together, and is intended to provide a device which will be less expensive than those commonly employed, and which can be more easily affixed to or removed from the papers without disfiguring them as is done now. The fastener is stamped from a sheet of thin metal, which is bent over upon itself at about the middle, forming two arms. From one arm of this strip, at or near the end, is stamped a small spike or pointed portion projecting toward the other arm. The latter arm is cupped or formed with a recess, of any suitable shape, so placed that on the two parts being pressed together the spike will enter the recess. This recess is the main feature of the invention, in combination with the spike and special form of the fastener, and allows the fastener to be applied by pressing the arms together with the finger and thumb, causing the spike to penetrate the paper and enter the recess without fear of the point entering the finger or thumb. The recess at the same time provides a small free space at the back of the papers, immediately opposite the point of the spike, enabling the latter to penetrate easily and pass through all the sheets before entering the recess.

In order that the invention may be more clearly understood, reference is had to the accompanying sheet of drawings, which illustrate my invention and various modifications of the fastener, and in which like letters of reference indicate like parts throughout the several views.

Figure 1 shows the blank from which the fastener is formed. Fig. 2 is a perspective view of the partially-formed fastener; Fig. 3, a similar view of the fastener complete. Figs. 4 and 5 are sections respectively of the partially-formed fastener and the complete fastener applied to the papers. Fig. 6 is a perspective view of a modification. Figs. 7 and 8 are respectively a perspective view and a

section of a slightly-different form of my invention. Figs. 9 to 13 are perspective views of other modifications.

A blank A is stamped out from a thin piece of metal, as shown in Fig. 1, the central part *a* being, preferably, narrower in order that when bent over, as shown in the perspective views, it may be more easily and accurately applied. From one end of this blank is stamped out the small tongue or spike B, preferably a short distance from the extremity, a V-shaped portion being turned up to form the spike. At a corresponding point in the other half of the blank a depression C is formed by bulging or stamping out the metal. In the finished fastener the arms are left sufficiently open to enable the papers to be pushed between the spike and the opposite arm before the arms are pressed together. The finger and thumb only are required with this fastening, as it is made of as soft metal as the spike will allow and with as little spring or resiliency as possible. Providing for this simple method of attachment is an important feature of my invention, and the papers can be secured much nearer to their margins than by the ordinary fasteners having bent-back legs.

When the fastener is applied by pressing the two arms together by the finger and thumb after the insertion of the papers, the spike B passes completely through the latter and enters the cavity C, as shown in Fig. 5, without danger of entering the finger or thumb. The arms can easily be parted to remove the fastener and release the papers by inserting a finger-nail under either side and raising it. It is not intended that the spike shall be turned over upon the papers to secure the same, as is the case in other paper-fasteners, and this permits of its easy removal, while at the same time the security of the papers when the fastener is affixed is insured by the fact that the pointed portion has passed through all the sheets and entered the recess arranged to receive it. With this fastener the edges of the paper can be brought level by pressing them against the central portion or bend, and the hole made is much less than that of the common fastener, thus leaving little disfigurement when removed. There is also no necessity to cut a slit in the papers when it is required to fasten together a number of sheets. In Fig. 6 the spike B' is formed



at the extremity of the fastener instead of being stamped out nearer the middle.

5 In the device shown in Figs. 7 and 8 the edges  $a'$  of the recessed side are slightly turned up to give a larger bearing-surface for the thumb or finger to press upon should the raised portion be found inconveniently prominent.

10 The depression  $C'$  shown in Fig. 9 is of channel form, made by bending the upper half of the fastener into a U-shaped cross-section longitudinally. According to Fig. 10 the channel is formed laterally or across the strip. In Fig. 11 a small portion  $C^2$  is pressed  
15 out into an arched form to make the necessary cavity or recess. It will be seen that this form of fastener is of the very simplest character, consisting of a metal blank having rounded and enlarged ends with a central reduced portion or waist, one of the ends having the perforating-spike stamped out of the same, while directly opposite the extended spike in the other end of the blank is the cup-shaped depression, which receives and  
20 protects the end of the spike. This is the simplest manner of making the fastener, and

it will be observed that as thus made it is reduced to the fewest parts operating in a most effective manner, and both the spike and recess or depression are within the margin of  
30 the blank, and thus the blanks are more economically cut and there are no projections to cause waste of material.

What I claim as my invention, and desire to secure by Letters Patent, is— 35

A paper fastener consisting of a blank having enlarged ends and a reduced center, the ends being folded over opposite each other, a perforating spike projecting from the inner face of one end and an imperforate depression made in the inner face of the other end  
40 opposite and in line with the spike both the spike and depression being within the marginal lines of the ends of the fastener, substantially as described. 45

In witness whereof I have hereunto set my hand this 5th day of June, 1894.

SAMUEL HENRY CROCKER.

In presence of—

FRANK WILLIAM PATTISON,  
EDMUND JAMES WOOD.