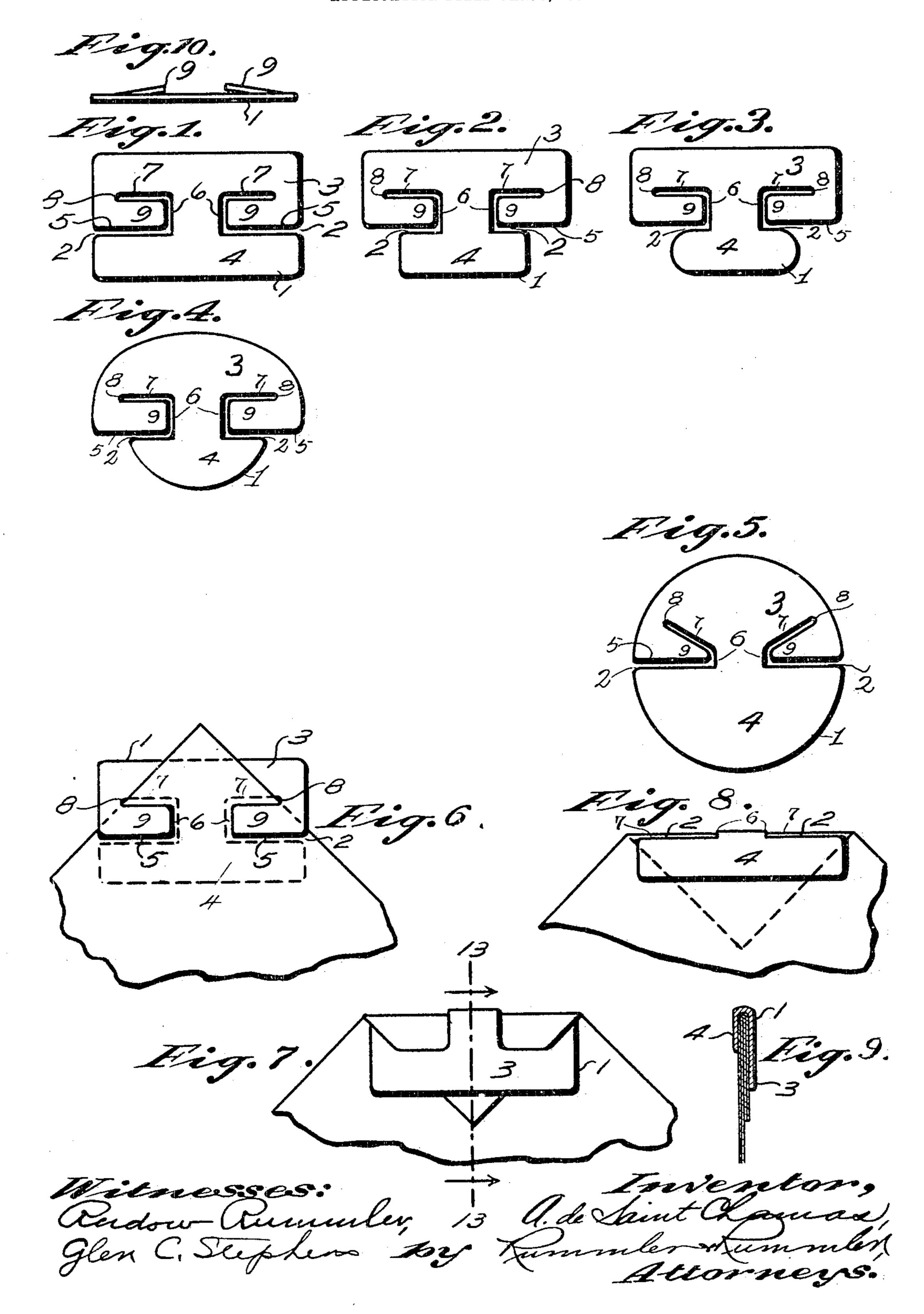
A. DE SAINT CHAMAS. PAPER FASTENER. APPLICATION FILED JAN. 9, 1905.



UNITED STATES PATENT OFFICE.

ALBERT DE SAINT CHAMAS, OF CHICAGO, ILLINOIS.

PAPER-FASTENER.

No. 798,661.

Specification of Letters Patent.

Patented Sept. 5, 1905.

Application filed January 9, 1905. Serial No. 240,287.

To all whom it may concern:

Be it known that I, Albert de Saint Chamas, a citizen of the United States of America, and a resident of Chicago, in the county of Cook and State of Illinois, have invented certain new and useful Improvements in Paper-Fasteners, of which the following is a specification.

My invention relates particularly to sheetmetal clips or fasteners for securing together a plurality of sheets of paper or forming closures for the open edges of envelops.

The main object of my invention is to provide an improved formation for paper-fasteners of this class whereby maximum security may be had with minimum weight of metal. I accomplish this object by the device shown in the accompanying drawings, in which—

Figure 1 is a plan showing the formation of a paper-clip constructed according to my invention. Figs. 2 to 5, inclusive, are modified forms of the clip, all embodying the characteristic features of my invention. Fig. 6 shows the first step in the operation of securing a plurality of sheets of paper together at one corner by means of a clip constructed according to my invention. Fig. 7 shows the second and final step in the operation. Fig. 8 is the reverse of Fig. 7. Fig. 9 is a section on the line 13–13 of Fig. 7. Fig. 10 is an edge view of the fastener looking from the bottom of Fig. 1.

In the form shown in the drawings the paperfastener consists of a thin plate 1 of sheet metal having recesses 2 cut into same from opposite 35 edges of the plate. The recesses 2 are preferably arranged in alinement with each other and divide the plate 1 into two leaves 3 and 4, which are adapted to be folded upon each other along the line of the recesses 2. The edges 5 4° of the leaf 3 which are adjacent to the recesses 2 are preferably straight and in alinement with each other, so as to form a guide for the bending of the plate. Each of the recesses 2 has at its inner end a branch slot extending trans-45 versely into the leaf 3. These branch slots are parallel to each other near the points where they connect with the recesses 2, and said branch slots have parts 7, which extend away from each other toward opposite sides of the 5° leaf 3. In Figs. 1 to 4, inclusive, the parts 7 of said branch slots are in alinement with each other, and in all of the figures the extremities 8 of the branch slots are equidistant from the edges 5 of the leaf 3.

In Figs. 1 to 4, inclusive, the main points of difference lie in the shape of the leaf 4.

Fig. 5 shows a similar clip, having a substantially circular contour and a modified form of branch slots.

For the purpose of facilitating the insertion of the sheets of paper below the tongues 9 these tongues are slightly bent up near the points of their connection with the main part of the leaf 3, so as to extend slightly out of the plane of the rest of the plate. This off-65 setting of the tongues 5 presents practically no opposition to the tight clamping of the paper between the leaves 3 and 4, since the branch slots closely approach the periphery of the plate at their ends 8 and the tongues 5 70 will accordingly lie as close to the plane of the leaf 3 as the thickness of paper will permit.

The operation of the device shown is as follows: When it is desired to fasten a plurality of sheets together at one corner, the sheets 75 are placed in a pile and one corner of the pile is slipped along the top of the leaf 4 and under the tongues 9 of the leaf 3, as is indicated in Fig. 10 of the drawings. The clip is slipped over the corner of the paper until it is stopped 80 through the engagement of the edges of the paper with the ends 8 of the branch slots. The operator now takes hold of the leaf 3 and folds the plate along the line of the branch slots 2, causing the sheets to fold on the line 85 of the edges 5 of the tongues 9. These edges being in alinement with each other guide the folding of the paper and insure that the plate also folds along the desired line. Although the branch slots 6 are parallel for a portion 90 of their length the plate affords least resistance to the bending along the line of the recesses 2, since at that point it is only necessary to bend the part of the plate lying between said recesses, while bending along any 95 other line extending across the plate in the vicinity of the branch slots would necessitate bending the parts of the leaf 3 which lie at each side of said branch slots together with the part lying between them. IOO

The fact that the parts 7 of the branch slots 6 extend away from each other and that the extremities 8 are widely separated permits a relatively large portion of the corner of the sheets of paper to be passed through the to5 branch slots. The edges 5, which lie along the fold of the paper, present a long bearing-surface in the fold of the paper and bear uniformly thereon throughout their length, thus affording great resistance to the tearing of the sheets along the fold and the consequent loosening of the clip. Another advantage of

this form of clip lies in the fact that the corner of the paper which is folded down is covered by the leaf 3 of the clip, as shown in Fig. 7, and is thus prevented from being readily torn up accidentally.

What I claim as my invention, and desire to

secure by Letters Patent, is—

1. A paper-fastener, comprising a thin plate of sheet metal having a pair of recesses entering from opposite edges of the same in substantial alinement with each other and dividing said plate into two leaves adapted to be folded upon each other along the line of said recesses, one of said leaves having a branch slot extending into the same from each of said recesses, said branch slots being substantially parallel with each other near the points where they join said recesses and then extending away from each other toward opposite sides of the leaf, substantially as described.

2. A paper-fastener, comprising a thin plate

of sheet metal, having a pair of recesses entering from opposite sides of the same, the side edges of each recess being substantially parallel with each other, and said recesses being 25 in substantial alinement with each other, dividing said plate into two leaves adapted to be folded upon each other along said recesses, one of said leaves having a branch slot extending into the same from each of said recesses, 30 said branch slots being substantially parallel with each other near the points where they join said recesses and then extending away from each other toward opposite sides of the leaf, substantially as described.

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Signed at Chicago this 6th day of January,

1905.

ALBERT DE SAINT CHAMAS.

Witnesses:
Eugene A. Rummler,
Glen C. Stephens.