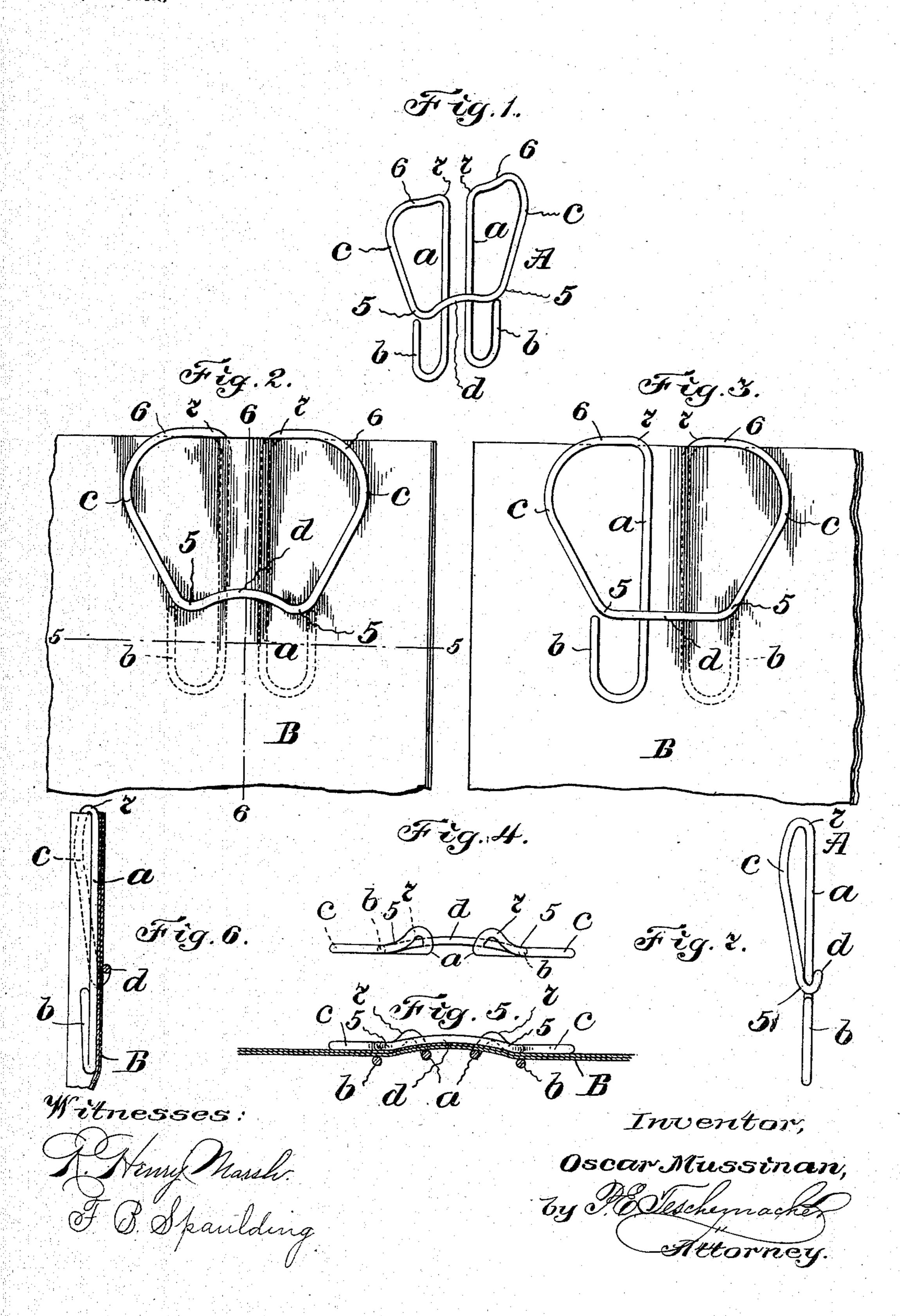
## O. MUSSINAN. PAPER CLIP OR FASTENER. (Application filed Aug. 15, 1802.)

(No Model.)



## UNITED STATES PATENT OFFICE.

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## PAPER CLIP OR FASTENER.

SPECIFICATION forming part of Letters Patent No. 714,388, dated November 25, 1902.

Application filed August 15, 1902. Serial No. 119,810. (No model.)

To all whom it may concern:

Be it known that I, OSCAR MUSSINAN, a citizen of the United States, residing at New York, in the county and State of New York, have invented an Improvement in Paper Clips or Fasteners, of which the following is a specification.

My invention relates to paper clips or fasteners formed of wire bent to the required shape and employed for temporarily holding together a collection of sheets of paper; and my invention has for its object to provide a clip or fastener of this character possessing improved attaching and clamping facilities and which when in place will offer no sharp points to engage other adjacent matter.

To this end my invention consists in a clip composed of a single piece of wire bent to form two central shanks the lower extremi-20 ties of which are turned upwardly, forming U - shaped end portions, which afford increased bearing-surfaces, and two side portions or wings extending outwardly from said shanks and united at their lower ends by a 25 straight or curved transverse portion extending over the said central shanks, the two wings and their transverse connecting-piece bearing against one side of the collection of sheets to be held together, while the two cen-30 tral shanks, with their U-shaped ends, bear, one or both, against the opposite side of said collection of sheets, which are thus held firmly together, as required.

In the accompanying drawings, Figure 1 is an enlarged perspective view of a wire paper clip or fastener embodying my invention. Figs. 2 and 3 are plan views of my clip applied in two different ways to collections of sheets held together thereby. Fig. 4 is an edge view of the top of the clip. Fig. 5 is a transverse section on the line 55 of Fig. 2. Fig. 6 is a vertical section on the line 6 6 of Fig. 2. Fig. 7 is a side elevation of the clip.

In the said drawings, A represents the clip, which is composed of a single piece of wire of suitable hardness and elasticity bent to form two central shanks a, the lower ends of which are turned outward and upward, forming two U-shaped portions b, which so afford increased or additional bearings at

these points for contact with the surface of the paper. From the upper ends of the shanks a athe wire extends outwardly and downwardly, forming two side portions or wings cc, the lower portions of which converge to the points 55 5 5 and are united by a straight or curved transverse portion d, which extends over and lies upon the central shanks a a, as shown. The upper portions 6 6 of the wings c c are adapted to lie against or adjacent to the edges 60 of the sheets to which the clip is applied, as shown in Figs. 2 and 3, and the U-shaped end portions b b form guides to enable the collection of sheets B, to which the clip is to be applied, to be more readily inserted and 65 forced between the shanks a a and the overlying wings c c and connecting piece d, which form the clamping-jaws of the device. At the points where the wings join the shanks are formed offsets 77, Fig. 4, and the wire at 70 these points is given a strong "set" by subjecting the wire to torsional strain, thereby causing the shanks a a to spring tightly up against the transverse piece d, so that when the clip is applied to a collection of sheets a 75 strong clamping and holding effect will be produced between the bearing-points of the clip. The entire clip is preferably given a slight concavo-convex shape transversely, as shown particularly in Figs. 1, 4, and 5, for 80 the purpose of producing an increased torsion on the wire when the clip is in place, thus increasing its binding or clamping action upon the papers to which it is applied. The clip may be applied to the collection of sheets in 85 such manner that both of the shanks a a will lie against the surface of the under sheet, as shown in Fig. 2, or with one shank against the under sheet and the other bearing against the upper sheet, as shown in Fig. 3. By 90 turning up the lower ends of the shanks a ato form the U-shaped end portions b b, as shown, no sharp points are presented to engage other adjacent papers or objects, and the liability of the clip being pulled off the 95 sheets is thus materially diminished.

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

A paper clip of approximately concavo-convex shape transversely, composed of a single 100 piece of wire bent to form two central longitudinal shanks, the lower ends of which are turned upwardly to form U-shaped end portions, and two side portions or wings extending outwardly from said shanks and united at their lower ends by a transverse portion extending over said central shanks.

Witness my hand this 13th day of August, A. D. 1902.

OSCAR MUSSINAN.

In presence of—

P. E. TESCHEMACHER,

F. B. SPAULDING.