

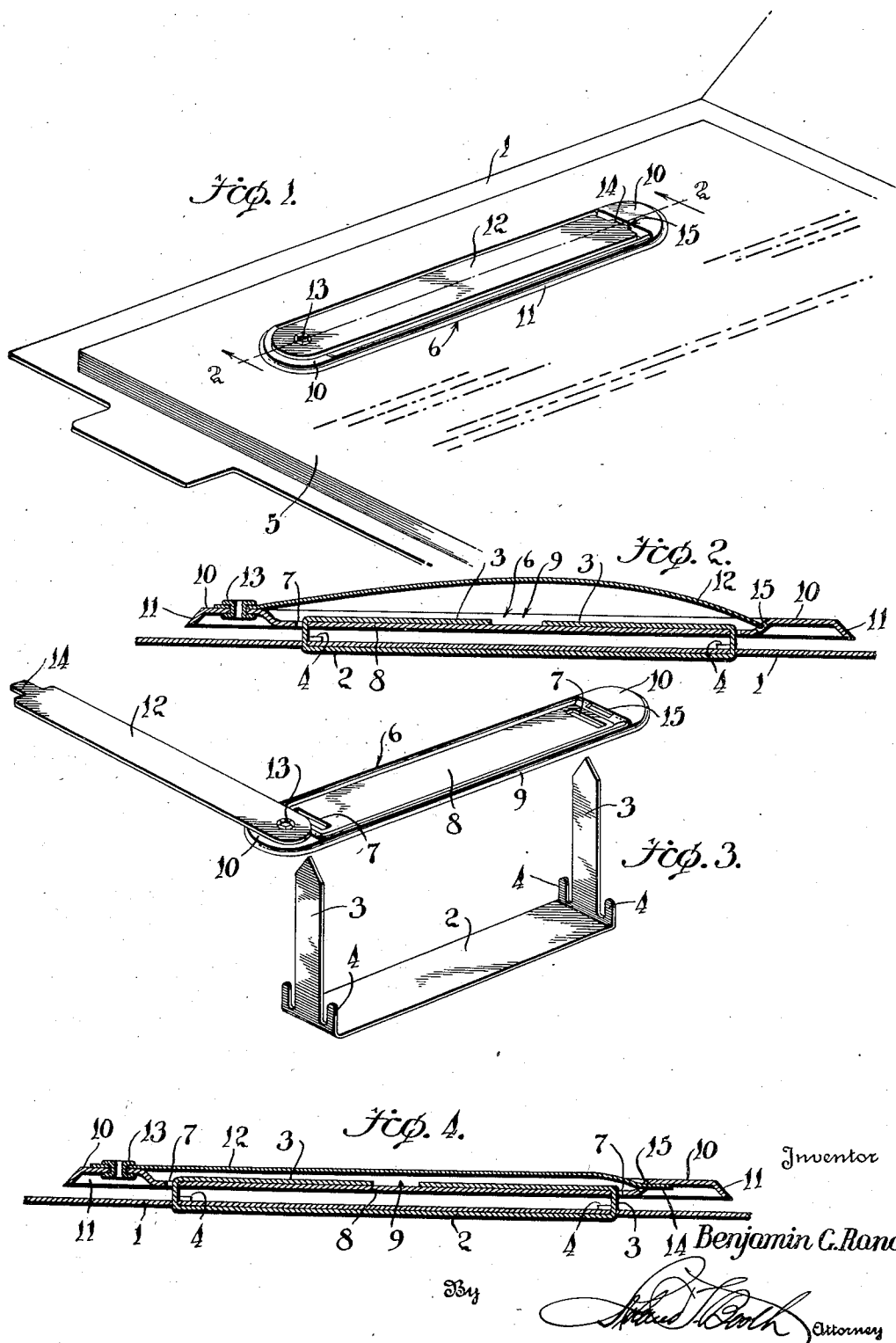
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PAPER FASTENER

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## PAPER FASTENER

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4 Claims. (Cl. 24-153)

This invention relates to improvements in paper fasteners of the type having a pair of separated prongs with a keeper formed to receive the ends of the prongs for lateral bending onto the face of the keeper to retain and bind papers on the prongs.

The invention comprehends the provision of a keeper for paper fasteners having an elongated metal strip provided with openings near opposite ends to receive prongs bent laterally over one face, while a cover strip is detachably connected to the keeper to extend over the free ends of the prongs for cooperation to house the prongs between the cover strip and keeper, the keeper being formed to provide a central prong receiving recess and marginal flange portions to provide a rigid structure in combination.

In the drawing:

Fig. 1 shows in perspective a portion of a correspondence folder and a series of paper sheets secured therein by means of a paper fastener employing the improved keeper having the cover strip cooperating to house the prongs in the keeper.

Fig. 2 is an enlarged cross section taken on line 2-2 of Fig. 1, the papers being omitted and the cover strip shown in a flexed position illustrating the method of applying and removing the strip from the prong housing position of Fig. 1.

Fig. 3 shows the base member and the keeper in perspective, disassembled and separated relation, and the cover in open position.

Fig. 4 is an enlarged cross section similar to Fig. 2 showing the cover member in operative position to house the prongs.

Paper fasteners of the character disclosed herein are usually used with correspondence and similar folders such as the folder indicated at 1 in Fig. 1 and comprise a base member 2 formed of an elongated sheet metal strip having relatively narrower prongs 3 extending laterally from opposite ends as shown in Fig. 3 with relatively small prongs 4 on opposite sides of the prongs 3 and on the ends of base 2 that serve to secure the base member to the folder 1. The prongs 3 extend through the folder 1 to receive a group of correspondence or other papers indicated generally at 5.

The free ends of the prongs have a keeper 6 applied thereto by extending prongs 3 through transverse slots 7 in opposite ends of keeper 6.

The keeper according to the present invention is formed of a thin sheet metal strip having a central body portion 8 extending between the transverse prong receiving slots 7 formed in op-

posite ends, while a marginal portion of the strip forming the keeper is provided with side portions 9 and end portions 10 offset laterally to one side of the keeper as clearly shown in Figs. 2 to 4, to form an elongated prong receiving recess between slots 7. The marginal edge portion of the strip forming the keeper is extended laterally toward the plane of body portion 8 from the side portions 9 and 10 as clearly shown in Figs. 2 and 4, at 11.

A cover strip 12 of spring steel that is both resilient and flexible has one end thereof secured to one of the end portions 10 by means of a tubular rivet 13 for pivotal movement normally in a plane parallel to the plane of the strip forming the keeper. The free end of cover strip 12 is reduced to form a tongue 14 adapted for engagement in a slot 15 formed in the other end portion 10 of the keeper in the manner disclosed in Figs. 2 and 4. In order to engage tongue 14 in the slot or opening 15, cover strip 12 is flexed upwardly as shown in Fig. 2 to shorten its length sufficiently to insert the end of tongue 14 in opening 15 in which position the cover strip is shown in Fig. 2. Upon release of the cover strip after the tongue is inserted in opening 15, it will assume the position shown in Fig. 4 due to the resiliency of the material from which the strip is formed.

In the use of this fastener construction with a folder, the base member is applied to the back of the folder 1 as shown in Figs. 2 and 4 with prongs 3 extending through the folder to receive papers 5. The ends of the prongs when extended laterally in the position shown in Fig. 3, for example, will receive the papers and following the application of the papers to the prongs in a well known manner keeper 6 is then applied to the prongs so they will extend through transverse slots 7, the cover member being in the position shown in Fig. 3. After the keeper is inserted onto the top of the group of papers in the manner shown in Fig. 1, the prongs are then bent laterally into the prong receiving recess formed in the keeper with the prongs extending toward each other in the recess in the manner shown in Figs. 2 and 4.

When this operation is completed, the cover strip 12 is then moved pivotally from the position shown in Fig. 3 to overlie the keeper, whereupon it is bent in the manner illustrated in Fig. 2 to engage tongue 14 in opening 15. The cover then being released, its natural resiliency will cause it to assume the position shown in Fig. 4. In this position the prongs will be housed in the recess in the keeper between the cover member and

the body portion in the manner shown in Figs. 1, 2 and 4.

The offset side and end portions and flange 11 cooperate with the central body portion of the keeper in forming a substantially rigid construction that can be made of light-weight sheet metal and that will provide rounded edges so that the keeper will not catch on adjacent objects and the cover strip when applied in the position shown in Fig. 1 will prevent the prongs from springing upwardly from the keeper and catching on other papers in the folder or other adjacent objects and will also prevent the prongs from mutilating the paper of the other cover of the folder. The cover member also cooperates to retain the prongs from being accidentally moved away from the keeper which would allow the keeper to become loose on the papers or to become entirely detached therefrom, and therefore, serves in combination with the keeper to provide a lock for the prongs in the attached relation of the parts, thereby efficiently holding the papers in bound relation on the prongs.

What is claimed is:

1. In a paper fastener, a keeper formed of a relatively long and narrow strip of stiff sheet material, said strip being formed in each end portion with a transverse prong receiving slot, an opening formed in one end of said strip between the end and the prong receiving slot, and a resiliently flexible cover strip pivoted at one end to the opposite end of said keeper strip and having the free end engageable in said opening by flexing said cover strip to engage said free end in said opening, said cover strip cooperating with said keeper to retain prongs in substantial contact with the face of the keeper.

2. In a paper fastener, a keeper formed of a sheet metal strip having a central long and narrow body portion formed at the ends with transverse prong receiving slots, said strip having

marginal side and end portions adjacent said central body portion offset to one side thereof to cooperate with said body portion to form an elongated prong receiving recess between said slots, and a resiliently flexible cover strip pivoted on one of said end portions and having the other end detachably interlocked with the other of said end portions by flexing said cover strip to shorten the distance between its ends for engaging and disengaging said cover strip in interlocked relation, said cover strip cooperating with the keeper to house prongs in said recess.

3. In a paper fastener, a keeper formed of a sheet metal strip having a central body portion provided at the ends with transverse prong receiving slots, marginal side and end portions of said strip adjacent said body portion offset to one side thereof to form a prong receiving recess on one side of said body portion between said slots, one of said end portions being provided with an opening, a resiliently flexible cover strip pivoted on the other end portion having a tongue on the free end for engagement in said opening by flexing said cover strip and to retain said cover strip over said recess to house prongs therein.

4. In a paper fastener, a keeper formed of a sheet metal strip having a central body portion provided at the ends with transverse prong receiving slots, marginal side and end portions of said strip adjacent said body portion offset to one side thereof to form a prong receiving recess on one side of said body portion between said slots, and a marginal edge flange on said strip at the outer edge of said side and end portions extending laterally thereto and toward the plane of the body portion, said flange, offset portions and body portions cooperating to form a substantially rigid keeper.

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