May 15, 1934. E. KAMRASS 1,959,271

SAFETY CLIP

Filed May 9, 1933

Fig. 1.

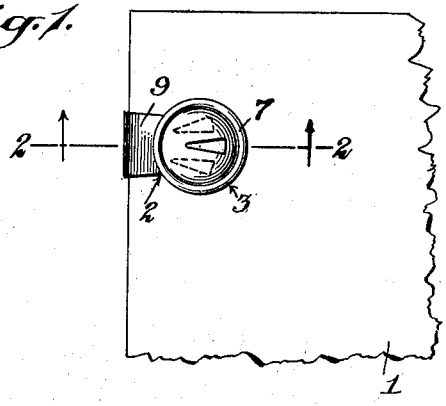


Fig. 2.

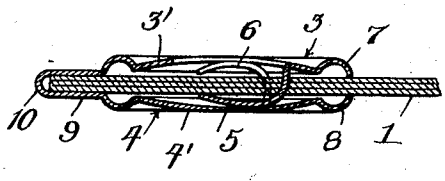


Fig. 3.

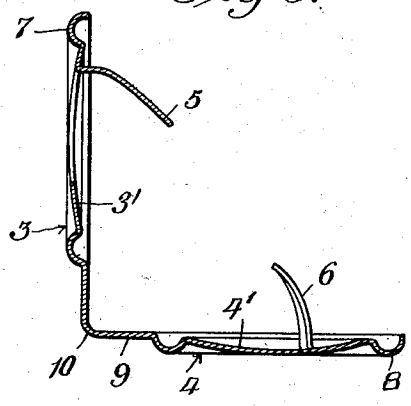


Fig. 4.

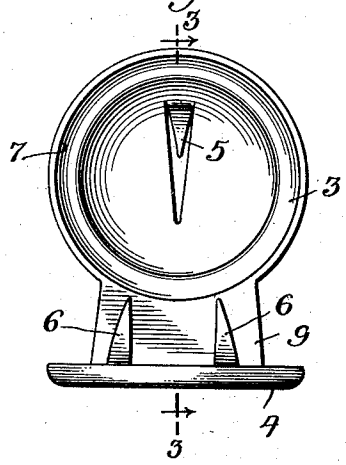


Fig. 5.

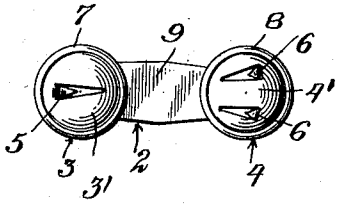
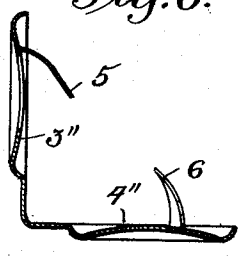


Fig. 6.



WITNESSES

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SAFETY CLIP

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6 Claims. (Cl. 24—153)

This invention relates to clips and particularly to an improved safety clip for papers and like objects, the object being to provide an improved yet very effective form of clip which may be easily applied.

Another object of the invention is to provide a clip for papers and the like wherein the parts are so formed as to present comparatively smooth and properly fitting portions for receiving the thumb and finger when applying the clip.

A still further object of the invention is to provide in a safety clip a structure including prongs and means for deflecting the prongs which will function without danger of causing the prongs to engage the hand during the application of the clip.

An additional object is to provide a safety clip for papers and the like wherein coacting prongs are provided at different parts of the clip, the prongs being positioned so as to be out of alignment when the clip is functioning, thus obviating the formation of a slit where the clip passes through the papers being held together.

A further object is to provide a clip having rounded ends with a central prong at one end and spaced prongs at the other, the spaced prongs being inclined inwardly of the end so as to produce a good clinching action when the parts are forced into functioning position.

In the accompanying drawing—

Figure 1 is an elevation showing a package of papers and a safety clip embodying the invention applied thereto;

Figure 2 is a sectional view through Figure 1 on the line 2—2, the same being on an enlarged scale;

Figure 3 is a sectional view through Figure 4 on the line 3—3;

Figure 4 is an elevation of the structure shown in Figure 3, the same being on an enlarged scale and showing the same structure illustrated in Figures 1 and 2; and

Figure 5 is an elevation of the structure shown in Figure 4 on a reduced scale and spread out flat.

Figure 6 is a view similar to Figure 3 but on a reduced scale and showing a slightly modified structure.

Referring to the accompanying drawing by numerals, 1 indicates a number of sheets of paper which are held together by a safety clip 2, the clip being constructed according to the present invention. It will be understood that the clip 2 can be used to clip together various articles including the sheets of paper 1 without departing from the spirit of the invention. Heretofore various forms of clips have been provided which present certain objections as, for instance, sharp corners that will tear the paper and other objects and injure the fingers of the operator. Also clips have been made heretofore using three or some other number of prongs, but these have been arranged in alignment and, consequently, tear or perforate the paper in a line so as to make a slit, thus reducing the holding action of the clip and more or less injuring the papers being held.

The improved safety clip embodying the invention overcomes these objections and others, and presents very desirable improvements thereover. As indicated clearly in Figure 1, the various prongs are not in alignment and, consequently, will not tear the papers otherwise than to perforate the same as the prongs are forced therethrough. As also shown in Figures 1 and 5 it will be seen that the clip 2 is provided with round ends 3 and 4, one end having a single prong 5 and the other two prongs 6. Prong 5 is struck out of the end 3 and is pointed in a plane toward the center of the end 4, while the prongs 6 are arranged at an angle so that when the parts are collapsed, as shown in Figure 2, the ends of prongs 6 will be bent to a certain extent toward the center of the bar or body 9.

In forming the ends 3 and 4 they are not only formed round but formed cup-shaped as indicated in Figure 3, and in forming the same cup-shaped beads 7 and 8 are provided which will stiffen and reinforce these ends, while at the same time providing a limited form of round recess in which the fingers or thumb may be placed when applying the clip and forcing the same to the position shown in Figure 2. By reason of the cup-shaped portions 3′ and 4′ the prongs are deflected as they strike the respective surfaces and eventually assume the position shown in Figure 2. It will be understood that the ends 3 and 4 are connected by a bar 9 which is integral with these ends, the respective beads 7 and 8 being formed on the ends and merging into the end portions of bar 9, as shown in Figures 3 and 4. The rounding of these ends and the forming of the beads 7 and 8 present a smooth structure whereby there is no chance of injuring the hand when applying the clip. The arrangement of the prongs 6 at an angle also obviates the chance of either of these prongs springing to one side or to a point from beneath end 4. This structure,

therefore, insures that the prongs will function properly but that it will be perfectly safe for a person to apply the clip.

As shown particularly in Figure 1, the prongs 6 are offset toward the center and, therefore, are closer to the bend 10 than the prong 5. This structure prevents the prongs from forming a slit in the paper, while at the same time providing means for properly gripping the paper. Preferably prong 5 is longer and stronger than the other prongs, although this is not always essential.

Prongs 5 and 6 have been shown as substantially smooth at their side edges but, if desired, they can be formed with teeth so as to hook into the paper or other objects.

In Figure 6 a slightly modified structure will be seen wherein the device is similar to that shown in Fig. 3 except that the parts 3'' and 4'' are bowed inwardly instead of outwardly. This structure acts to deflect the prongs to secure a good clinching action when the device is in use. In this form as well as in the preferred form any desired number of prongs may be used, for instance, one, two or three or more. Three have been found desirable for most purposes, though sometimes one or two are used where the device is small and where it is to be used in a special way.

I claim:—

1. A clip of the character described comprising a body bent at the center, said body at each end merging into a circular bead, which bead in turn merges into a cup-shaped central portion, a prong pressed from one of said central portions and a pair of prongs pressed from the other central portion, said prongs being adapted to engage the concave side of said cup-shaped portions when the clip is in functioning position, whereby the prongs are bent into a clinched position.

2. A clip of the character described comprising a body merging into a pair of rounded ends, said body near each end being formed with an annular bead positioned so that a portion of the bead forms the periphery of the end, and a prong construction extending from each of said ends.

3. In a safety clip of the character described a body merging into a pair of end members, one of said end members having a pair of prongs extending in a direction to converge.

4. A clip of the character described comprising a body merging into a pair of large end members, one of said end members having a centrally positioned prong extending in a direction along the medial line of the body, and the other end member having a pair of prongs which extend in a direction to converge, the last mentioned prongs being positioned nearer the center of said body than the first mentioned prong.

5. A metallic paper safety clip formed with a plurality of prongs to pierce and clamp together a number of sheets of paper, comprising a metal body bent substantially centrally and merging at each end into substantially cup-shaped rounded portions, the concave portions of the ends facing when the clip is in use, a single prong extending from one of the cup-shaped ends, and a pair of prongs extending from the other cup-shaped end, said pair of prongs being spaced nearer the center of the device than the first mentioned prong and positioned so that the first mentioned prong will fit between the second mentioned prongs when the clip is in use.

6. In a safety clip of the character described, a body merging into a pair of end members, both of said end members having an annular reinforcing bead, and a curved portion within the bead, each of said curved portions being formed with a prong.

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