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CLASP

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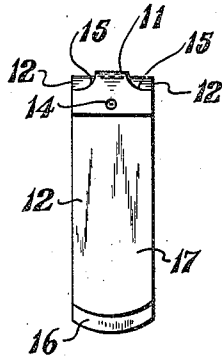


FIG. 1

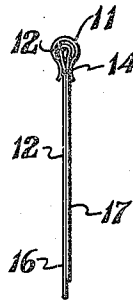


FIG. 2

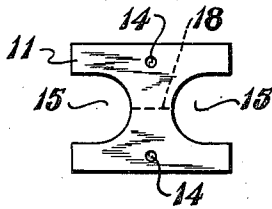


FIG. 3

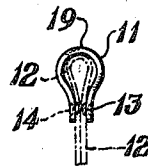


FIG. 4

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CLASP

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2 Claims. (Cl. 24—259)

This invention relates to fasteners generally and especially to those of the clasp type. The special purpose of the particular type of clasp described in this application is for marking certain file cards or papers for the purpose of calling one's attention to a notice or memo associated with the card and clasp. To accomplish this purpose the device bears some significant color and is generally termed a signal or indicator tab.

When metal or opaque tabs are employed it is routine practice to remove or shift the position of the clasp when reading the notations on the card in order to be sure that no portion of the memorandum is covered by the tabs. The general object of my invention is to provide a signal tab of a semi-transparent or translucent material such as Celluloid so that any notations or memorandums on the card or paper may be read through the tab without disturbing it.

It would be impractical to make the tab in one piece and of one material such as Celluloid since the elasticity of such a material is generally too low to provide the springy action required. In order to overcome this defect and yet retain the advantages of the translucent material a separate resilient spring clip has been designed. The clip has been formed of a spring metal and adapted to act in combination with the tab body or translucent material and provide the necessary clamping characteristics.

When a plain piece of spring steel or similar metal is bent through 180 degrees (back upon itself) the sharp bend frequently fractures the metal at the bend. Even though no fracture does occur as a result of the bend, nevertheless, the distortion beyond the elastic limit ordinarily places a permanent set in the material and thus the resiliency required in a clip of this type would be lost. Therefore, in the proposed device a clip has been provided of a novel design to overcome the above mentioned difficulties.

Another object of the especially designed spring clip when employed in combination with the Celluloid body is, that both may be bent into shape together during the same operation. Although the clip and tab are united in a simple bending operation the design of the clip not only assures the springy characteristic required as mentioned above but also secures the union of the clip and tab permanently in an operable combination. The type of clip described also prevents a complete fracture of the Celluloid or tab portion at the bend which might result from too abrupt a bend in the clip.

Still another feature of the design resides in the cut out sections of the spring clip. These cut out portions provide relieving areas whereby the body member is not creased to the point of fracture when the clip is bent into position over said body.

Other objects and advantages of the invention will be pointed out in the detailed description below when read in conjunction with the drawing wherein:

Fig. 1 is a front elevational view, and Fig. 2 is a side elevational view of the complete signal clasp.

Fig. 3 is an enlarged top plan view of the formed spring clip before bending and crimping into position.

Fig. 4 is an enlarged side elevation of the clip showing its characteristics.

In detail the clasp comprises a tab 12 made of an inelastic translucent or transparent material such as Celluloid. Said body portion or tab 12 is made from material supplied in the form of a strip which is cut to length and folded back upon itself to form two legs 16—17 of unequal length.

A spring clip 11 is also formed preferably from a strip of spring steel cut to size as shown in Fig. 3. The strip of inelastic material 12 is then placed on the clip 11, and the two parts folded together. The fold in the spring steel forming the clip however is not an abrupt bend but rather a smooth curve as indicated at 19, Fig. 4. Said curve 19 is made of as small a radius as possible without fracturing the spring clip or inelastic Celluloid body.

Another feature of the clip design is the cut-outs or notches 15. The object of providing such notches is evident when one studies the relative reactions of the spring clip and the inelastic tab, under a bending strain. By uniting the body 12 and clip 11 and bending the two together so that the body 12 is inside the clip 11, the curvature or degree of bend is greater on the inner or body member 12. By experiment it was found that a clip made of a rectangular piece of material (without the notches 15) frequently caused the Celluloid tab to fracture along the fold line even though the bend was not excessive.

By limiting the amount of bend in the clip the difficulty of fracturing the body member might be eliminated. However in case the automatic machine used for bending the clip got out of adjustment and caused an excessive bend the defect might not be noticed at the time. By providing the notches 15 in clip 11 the tab ma-

terial 12 in that area is relieved of the excessive bending strain. Therefore by removing a portion of the spring clip 11 along the line of bend 18 one of the purposes of the notches has been accomplished by preventing said clip from pinching and fracturing the body member over at least a portion of the bend. In Fig. 3 that portion of the clip still remaining is about one third the width of the body member 12 and for want of a better term may be called a strap. The same result, however, may be obtained if the central portion of the clip 11 adjacent the bend were removed so long as a portion of the fold in the body member 12 cannot be pinched by the spring clip 11.

Therefore one of the objects of the proposed design for the spring clip 11 when used in combination with the Celluloid body 12 is, that the line of bend of the clip is shorter than that of the body 12. In other words, the width of the spring clip along the line of bend (18, Fig. 3) is less than the width of the tab or body member along its line of bend.

Therefore by employing the proposed type of clip, complete fracture of the Celluloid tab at the bend is eliminated and the legs of the tab 12 remain integral parts of the single element. A further advantage of the notches or cut-out portion 15 is that the colored tab 12 may be seen, when viewing the card edgewise. Therefore when a series of cards bearing colored signal tabs of the type described herein are employed in a file the color of the tab may be readily determined without moving or separating the cards.

During the operations of bending or forming the clip it is crimped on both sides as shown at 14; said crimping resembles an ordinary prick-punch. Crimping at 14 depresses or displaces the material from the outer face of the clip and causes a lip or point 13 to project from its inner side. Said points 13 become imbedded in the inelastic tab material 12 and prevent the clip 11 from sliding off the body 12. As related above the purpose of the cut-outs 15 is to aid in preventing fracture of the inelastic body in that area. However, in case the body should fracture along the bend, the points 13 will tend to hold and retain the separate legs 16—17 of the body in relative operating position.

By folding the tabs on a line just off center, the long leg 16 of the tab will extend beyond the borders of the short leg 17 as illustrated in Fig. 1. By that type of structure the clasp can be readily separated for fastening on a file card or paper.

Another characteristic of the proposed clasp is the minute size of the lips of the spring clip 11 as compared to the legs 16—17 of the body. By making the clip as small as possible the area of the card obscured by the opaque spring clip is negligible. Since the clip is bent along its center line 18, both legs of the clip 11 are of equal length and extend equal distances down the front

and back of a file card. Consequently any memorandum occurring under the long leg 16 on the back of the card may be read without removing the clasp similar to memorandums on the front of the card.

The method employed for making the complete clasp is as follows: A rectangular piece is cut from a strip of spring metal for providing the blank from which the clip 11 is formed. Notches 15 in the shape of half an oval are then cut in opposite sides of the clip blank. The Celluloid body portion 12 is then laid across the clip blank so that the center line of the body 12 is offset from the center line 18 of the clip blank and the two pieces folded or bent back upon themselves, the body 12 occupying the inside position in the combination. Then by means of a die or prick-punch the clip 11 is crimped tight on body 12 by forming depressions 14 to form points 13. Said points 13 are thus indented into the body 12 thereby firmly fastening the two elements together and maintain them in an operable combination.

In actual practice the most common size of blank from which the translucent tab legs 16—17 are formed is approximately five-sixteenths of an inch wide by two inches long. The actual size of the blank from which the spring clip illustrated in Fig. 3 is formed is approximately one-quarter of an inch wide by five-sixteenths of an inch long. In the completed form the clip 11 (opaque portion of the device) overlaps the edge of the file card less than one-eighth of an inch. The above dimensions are for a standard size signal tab and are given merely for comparison of the sizes of the elements making up the same. Various sizes of signal clasps may be made within the scope of this invention by making the relative sizes of their elements in proportion to the figures given above.

I claim,

1. A signal tab including a body member from a strip of inelastic, semi-transparent material folded back upon itself and forming two legs of unequal length, one each side of the bend, and adapted to slide over the edge of a card, and a spring clip made from a strip of elastic material of a relatively smaller size than said body member and fastened to said body member by bending said clip over the outside of the body member and along a line adjacent the line of bend in the body member said clip being notched at each side for removing a portion of the area along the line of the bend.

2. A device of the type described in claim 1 characterized by said spring clip being provided with points projecting from the inner surface of said clip and adapted to indent said body member for securely fastening the two elements together and maintaining them in an operable combination.

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