United States Patent

Corey

[54] FASTENER MEANS

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- - 24/153 FB, 153

[56] References Cited

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1,878,177	9/1932	Pedersen	
3,271,829	9/1966	Corey	

[15] 3,641,632 [45] Feb. 15, 1972

FOREIGN PATENTS OR APPLICATIONS

434,525 9/1935 Great Britain24/153 BP

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[57] ABSTRACT

A device for fastening papers or the like to a backing member including a strip member having bendable prong end portions on which papers are to be impaled and an overlay member for fixing the strip member to the backing member. The overlay member is characterized by an intermediate portion adapted to straddle the strip member and end portions having a pair of apertures to receive the prong portions of the strip member. Slits extending from the apertures to the free ends of the end portions may be provided to facilitate assembly of the strip and overlay members.

3 Claims, 3 Drawing Figures



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FASTENER MEANS

BACKGROUND OF THE INVENTION

It is usual practice to provide a backing member, such as the leaf of a file folder, with a fastener device for detachably holding papers or the like thereon. One type of fastener device commonly used comprises an elongated metallic member having an intermediate portion secured to the folder leaf and a pair of bendable prong or end portions, which may be bent to an upright position to permit papers to be impaled thereon. The prongs are then bent down against the surface of the paper to secure the latter to the folder leaf.

One suitable arrangement for securing fasteners of this type to a file folder leaf or similar backing member is my prior U.S. 15 Pat. No. 3,271,829.

SUMMARY OF THE INVENTION

The present invention relates to fasteners for holding papers or the like on a backing member and more particularly to an 20 improvement in fasteners of the type disclosed by my prior U.S. Pat. No. 3,271,829.

In accordance with the present invention, an overlay member, which serves to secure a strip member to a backing member is provided with apertures to receive prong end portions of the strip member so as to positionally locate the latter relative to the overlay member both before and after the overlay member is fixed to the backing member. This arrangement permits storage and handling of the fastener as a unit, and 30 makes for accurate trouble free mounting of the fastener on the backing member.

In accordance with an alternative embodiment of the present invention, the overlay member is provided with slits, which are arranged generally parallel to the relatively upper 35 and lower or side edges of the overlay member and extend between the apertures and the end portions thereof. The slits serve to define pairs of relatively movable end tabs, which when bent permit insertion of the prong end portions into the apertures without requiring excessive bending of the strip 40 member. When the overlay member is secured to the backing member, as by adhesive, the end tabs are also secured in place and function to maximize the bonding area between the overlay and backing members.

A further feature of the fastener according to the present invention is to position the prong end receiving apertures on an offcenter line extending lengthwise of the overlay member, such that there is a substantially larger bonding area on one side of such line than the other. When fixing the overlay 50 member on the backing member, the larger bonding area will underlie the main portion of the impaled sheets and effectively resist the separating forces exerted on the overlay member under severe conditions, as for instance, when all of the impaled sheets are simultaneously folded back over the fastener 55 or the backing member is lifted by grasping the sheets. Both desired performance and material cost savings may be achieved when the line bisecting the apertures is spaced from the relative lower edge of the overlay member a distance corresponding to approximately two-thirds the width of the over- 60 lay member.

The advantages of the present invention will appear more fully hereinafter from a consideration of the following detailed description taken together with the accompanying drawing 65 wherein:

DRAWINGS

FIG. 1 is a fragmentary perspective view of a file folder and shows in exploded relationship the parts of the novel fastener 70 device;

FIG. 2 is a plan view of the novel fastener device with the fastener device applied to a leaf of the folder of FIG. 1; and

FIG. 3 is a fragmentary perspective view of an alternative embodiment of the present invention.

DETAILED DESCRIPTION

Referring now to the drawing, a novel fastener device made according to the present invention is generally designated as 10 in FIGS. 1 and 2. A backing member, upon which fastener 10 is adapted to be mounted, is generally designated as 11 and shown in FIG. 1 as being in the form of a conventional file folder having leaves 12 and 13 adapted to be folded over along a fold line 14. It will be understood however, that fastener 10 device 10 is readily adaptable for use with any backing member to which papers or the like are to be attached in stacked relationship.

Fastener device 10 includes an elongated strip member 16 and an elongated overlay member 18, which serves to maintain strip member 16 fixed in a selected position on backing member 11, such as adjacent the upper marginal edge of leaf 12. Strip member 16, which will be hereinafter referred to as having an intermediate portion 19 and pair of bendable prong or end portions 20 and 21, may be formed of any suitable material, such as metal.

Overlay member 18 may be formed from any suitable material, such as a paper stock base 22 having laminated to the outer surface thereof a plastic film, cloth fabric or other 25 material 23, which serves to provide for increased strengths and a decorative appearance. The inner or bottom surface of overlay member 18 may be bonded to leaf 12 by suitable means, such as by a pressure-sensitive adhesive carried on base 22.

Again referring to FIGS. 1 and 2, it will be seen that overlay member 18 is of a generally rectangular configuration having lengthwise extending edges 26, 27, which define the relatively upper and lower edges of member 18 when the latter is fixed to leaf 12. Overlay member 18 may be further characterized as having an intermediate portion 28, which overlays intermediate portion 19 of strip member 16, and end portions 30, 31 having apertures 32, 33, which receive prong portions 20, 21 when the fastener 10 is assembled.

With the above construction, fastener 10 may be assembled by bowing overlay member 18 and passing strip 16 along a straight line path lengthwise of member 18 through apertures 32, 33. Alternatively, strip 16 may be bowed into a generally U-shaped configuration and the prongs 20, 21 simultaneously 45 passed through the apertures. In any event, strip 16 is frictionally retained in assembled condition, so as to facilitate handling of the fastener as a unit.

Apertures 32, 33 facilitate accurate positioning of prongs 20, 21 relative to leaf 12 and cooperate to restrain strip 16 from being pulled from under intermediate portion 28 in the event that no adhesive is applied to that portion of base 22 immediately above and in engagement with the strip member. Normally, however, adhesive would be applied to the entire lower surface of base 22.

In accordance with the arrangement thus far described, prongs 20 and 21 are adapted to be bent upwardly at substantial right angles to leaf 12 so as to permit papers, not shown, to be impaled thereon. Prongs 20 and 21 are then bent back down against the surface of the papers to secure same to leaf 12. The above procedure is repeated as required to remove or add papers to fastener 10.

An alternative embodiment of the fastener of the present invention is shown in FIG. 3.

In reference to FIG. 3, it will be noted that a particular feature involves positioning of the apertures such that they are bisected by a line 40, which is generally parallel to upper and lower edges 26, 27 and spaced from lower edge 27 a distance greater than about one-half and preferably approximately equal to two-thirds of the width of overlay member 18. Thus, the largest area of member 18 bonded to leaf 12 will underlie the main portion of the impaled paper. This permits member 18 to more effectively resist the separating forces exerted thereon under severe conditions, such as when a large 75 member of impaled papers are simultaneously folded back

over the fastener or when the backing member is lifted by grasping the papers.

Again referring to FIG. 3, it will be understood that the end portions of member 18 are, as shown only in the case of portion 30, provided with slits 42, which extend from their associated apertures generally parallel to edges 26, 27 and serve to define pairs of relatively movable tabs 44a, 44b. Assembly of members 16 and 18 is affected by moving tabs 44a, 44b relative to one another, so as to facilitate entry of the prongs through slits 42 into their receiving apertures. Subsequently, 10 tabs 44a, 44b will return to their nondeformed, or coplanar condition, wherein they cooperate with intermediate portion 28 to retain member 16.

Preferably, the entire lower surfaces of tabs 44a, 44b are bonded to leaf 12, such that there is substantially no weakening of member 18 due to the presence of slits 42.

It will be understood of course that the embodiment illustrated in FIGS. 1 and 2 may be modified by incorporating therein one or the other of the features discussed with reference to FIG. 3. Also, it is to be expressly understood that 20 the invention is not limited to the specific embodiments illustrated and described above in detail, since various changes in and additions to the fastener of the present invention will likely become evident to those skilled in the art in view of the foregoing description. 25

I claim:

1. In a device for fastening papers or the like to a backing member including an elongated deformable strip member characterized as having an intermediate portion and prong end portions extending in opposite directions from said inter- 30 mediate portion for impaling and retaining papers on said backing member, and an elongated overlay member for adhesively fixing said strip member to said backing member with said intermediate portion of said strip member arranged between said backing member and a rear surface of said overlay member, the improvement comprising:

said overlay member is of generally rectangular configuration having lengthwise extending side edges defining upper and lower edges of said overlay member when fixed to said backing member, said overlay member having a pair of apertures spaced inwardly of opposite ends of said overlay member for receiving said prong end portions projecting forwardly through said overlay member from said intermediate portion of said strip member, and said overlay member being slit along lines arranged generally parallel to said edges and extending between said apertures and said ends thereof, said slits defining adjacent each said end of said overlay member a pair of relatively movable tabs normally disposed in coplanar relationship, tabs of each said pair being movable from said coplanar relationship to permit entrance of one of said prong end portions to one of said apertures through an associated slit and being returnable to said coplanar relationship to prevent removal of said one prong end portion from said one aperture through said associated slit.

 A device according to claim 1, wherein said apertures are bisected by a line arranged generally parallel to said edges and spaced from said lower edge a distance of between about onehalf and two-thirds the width of said overlay member as measured between said edges, whereby a greater area of said overlay member is fixed to said backing member intermediate said apertures and said lower edge than between said apertures and said upper edge.

3. A device according to claim 2, wherein said bisecting line is spaced from said lower edge a distance of approximately two-thirds said width.

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