Nov. 10, 1959 W. B. STILLER 2,912,030

KEY CASE

Filed May 7, 1958

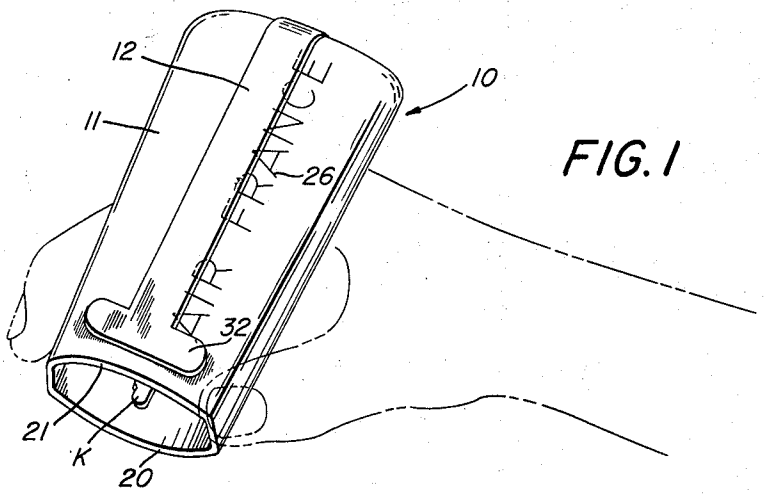


FIG. 1

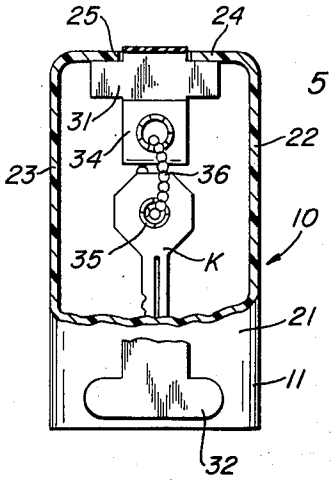


FIG. 2

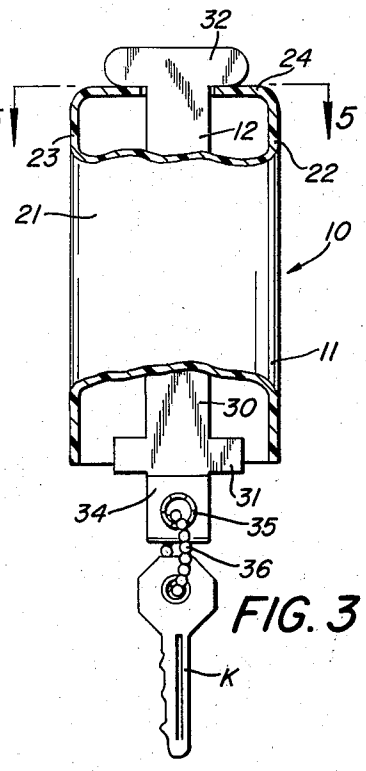


FIG. 3

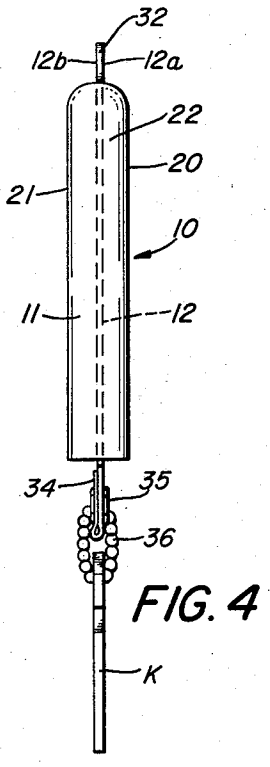


FIG. 4

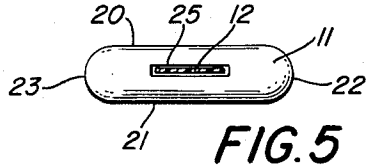


FIG. 5

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KEY CASE

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2 Claims. (Cl. 150—40)

This invention relates to the art of key cases in general and, in particular, relates to that type of key case wherein keys as a group are selectively moved in and out of a carrying pouch for the same upon manipulation of a retaining strap that is provided thereon.

In the known prior art of key cases, it has been previously taught that a group of keys can be carried on one end of an elongated strap, with the strap then being associated with a key pouch so that upon pulling of the strap the keys will be moved into the pouch, while upon loosening of the strap and holding the pouch in proper position, they will fall to a position exteriorally of the pouch. Representative key cases showing this general principle are set forth in United States Patent 1,414,798, issued May 2, 1922, to P. H. Welcker, and United States Patent 1,766,801, issued June 23, 1930, to C. M. Ragsdale.

While key cases of this general type have been found acceptable, the same are nonetheless subject to certain difficulties that preclude low cost manufacture of the same. First and foremost of these difficulties is the fact that some retaining or clasping means are invariably necessary to retain the strap against movement with respect to the pouch when the keys are not in use. In this regard, the conventional approach, as evidenced by the disclosure of the aforementioned patents, has been to provide a button type snap connection between the strap and an appropriate part of the pouch so that the keys may be retained in the pouch by snapping the end of the strap with respect to the lower end of the pouch.

As a second disadvantage of the known prior art type of device, it has been further found that key cases of this type do not lend themselves to use in advertising programs wherein the same would be given away with the donor's advertising imprint provided on the same. The specific objection in this regard has been that when the strap is snapped in place on the pouch, the same covers a substantial portion of the advertising thereon so that the benefit of the same is lost to the donor.

With the advent of certain plastic materials, such as polyvinyl chloride, which lend themselves to manufacture by dipping, it has been proposed that the pouch of the article be made of this plastic material and then equipped with a snap of the type shown in the prior art. While manufacture in this manner results in the production of a lower cost item, the attendant difficulties above discussed are still present, and accordingly, the resultant product is deficient in this regard.

It has been found, however, that the conventional snapping arrangement can be dispensed with by employing a special type of strap that is treated to have a flat polished surface that can be wiped into contact with the body of the pouch, with it being discovered that this polished surface will, in and of itself, exert sufficient holding force against a plastic body to eliminate slipping or dislocation of the strap from the pouch when the keys are not in use. Specifically, extremely satisfactory results have been obtained by employing a plastic type polished strap in connection with a dipped pouch made from polyvinyl chloride, it being discovered that when the polished surface of the strap is wiped in place on the pouch by the user's hand, that sufficient adherence between pouch and strap will exist to permit use of the same without the necessity for a button-type snap arrangement.

As a still further benefit of this type of arrangement, it has been further discovered that if both sides of the strap are polished, that the strap may be applied over either flat surface of the pouch and the same will adhere thereto, regardless of the side selected.

As an even further advantage, it has been discovered that if the strap is made of a transparent material, that the advertising provided, as by printing on the pouch, will not be covered by the strap when the same is positioned in retaining condition thereon. Additionally, there will be no projections or sharp surfaces present that would normally cause wear in the user's pocket.

Production of a key case embodying the above advantages accordingly becomes the principal object of this invention with other objects thereof becoming more apparent upon a reading of the following brief specification, considered and interpreted in the light of the accompanying drawings.

Of the drawings:

Figure 1 is a perspective view of the improved key case positioned in the hand of a user.

Figure 2 is an elevational view, partly broken away and in section, and showing the position of the component parts in closed position.

Figure 3 is a view similar to Figure 2, but showing the key case in open or usable condition.

Figure 4 is a side-elevational view of Figure 3.

Figure 5 is a sectional view taken on the lines 5—5 of Figure 3.

Referring now to the drawings, and in particular to Figure 1 thereof, it will be seen that the improved key case generally designated by the numeral **10**, includes a key pouch **11** and an elongate strap member **12**; the arrangement being such that upon attachment of a key K to one end of the strap **12**, the keys will be drawn within the pouch **11** upon re-positioning of the strap, as shown in Figure 1 of the drawings.

Considering the structure of the pouch **11** per se, it will be seen that the same is of generally thin, flat, one-piece construction so as to have opposed flat wall surfaces **20** and **21** interconnected by side walls **22** and **23** with these wall sections terminating in an end wall **24** as shown in the drawings. In this manner, an envelope is defined that is open at one end to permit ingress and egress of the key K with respect to the internal void of the pouch **11**. In order that the strap **12** may be operatively associated with the pouch **11**, the end wall **24** is shown provided with a rectangular opening **25** through which the middle portion of the strap **12** may freely slide, as will now be described.

Accordingly, and referring next to Figure 3 wherein the strap **12** is shown in its flat form, it will be seen that the same is defined by a thin elongate sheet of preferably flexible plastic material. In plan, the strap **12** includes a central portion **30** that terminates at its longitudinal ends in enlargements **31** and **32**, with the enlargement **31** limiting the amount of withdrawal interiorally of the strap **12**, while the enlargement **32** serves to limit the amount that the keys can be withdrawn, as is clearly shown in Figure 3. Additionally, the strap **12** also has the key-receiving end thereof defined by a folded-over portion **34** (Figure 4) through which a metallic ring **35** may be pressed or secured for the purpose of receiving a key chain **36** with the portion **34** preferably being formed by folding the strap over to provide reinforcing at this point.

Although not capable of being shown in the drawings, it is preferred that either one or both of the planar surfaces

12*a* or 12*b* of the strap member **12** be polished so that upon positioning of the strap **12** as shown in Figure 1, there will be an adhesion between this polished surface and the external surface of either wall member **20** or **21**. In this regard, it is generally to be understood that the thickness of the strap is relatively small by comparison to the wall thickness of the pouch member per se and, in this manner, the strap can be accurately wiped in place on the external wall surface of the pouch by the user, regardless of whether the same has been deformed as a result of the keys being positioned therein.

While the structural characteristics of the pouch **11** and the strap **12** have been described above, the manufacture of the same will now be considered. In this regard, the pouch **11** is preferably made of polyvinyl chloride and the actual manufacture of the same can be accomplished by the dipping of a mandrel into a solution of polyvinyl chloride followed by withdrawal of the mandrel with the formed pouch body thereon. Bodies formed in this fashion will have a level exterior surface so that polishing thereof is not normally required. Similarly, with regard to the strap member, best results have been obtained by using thin strips of vinyl plastic material and then cutting the same to planar outline shown in Figure 3. The opposed planar surfaces of the strap are preferably polished by either roller or press polishing methods to make these surfaces relatively smooth for adherence to the external surface of the pouch **11**, as has been described.

In use of the improved pouch **11**, it will be first assumed that the pouch **11** and strap **12** have been made and at such time as it is desired to assemble the same, it is merely necessary that the tab ends of enlargement **31** be folded over and passed through the opening **25**.

At this time the key K may be placed on chain **36**, with chain **36** being passed through ring **35** to secure key K with respect to strap **12** and pouch **11**.

If it be assumed first that the key K is in the extended condition of Figure 3, it is merely necessary that the tab portion **32** be pulled upwardly of Figure 3 at which time the key will be automatically moved into a position interiorly of the pouch **11**, as shown in Figure 2 of the drawings. With the key thus positioned, the portion of strap **12** that is disposed exteriorally of pouch **11** may then be wiped across the external surface of either wall **20** or **21** and upon such wiping, an adherence will be created between the strap and pouch. In this closed condition, the key case may be handled freely and placed in the user's pocket or purse and the keys will not become dislodged therefrom.

When it is desired to remove the key K for use, it is merely necessary that the same be grasped by the user as shown in Figure 1, and then moved to a position where the key K would drop from the pouch were it not for the retaining force offered by positioned strap **12**. In this position, if transverse pressure is applied by the user's fingers on the end walls **22** and **23**, two distinct things will happen.

First, the walls **20** and **21** will be deformed to the arched configuration of Figure 1 to result in release of contact between key and pouch, and, secondly, the end portions of enlargement **32** will be forced out of contact with the external surface of wall **21**, (Figure 1). When this contact between strap and pouch has been broken as just indicated, the remainder of strap **12** may be stripped from pouch **11** and moved to a vertical position of alignment with opening **25**. At this time, upon release of enlargement **32**, the keys will merely drop out to the position of Figure 3, with enlargement **32** limiting the amount of withdrawal of the key.

While a full and complete disclosure of the invention has been set forth in accordance with the dictates of the patent statutes, it is to be understood that the invention is not intended to be so limited.

Accordingly, while certain specific compositions have been suggested, it is to be understood that equivalent compositions could be employed without the exercising of invention. Accordingly, modifications of the invention may be resorted to without departing from the spirit hereof or the scope of the appended claims.

What is claimed is:

1. A key case of the character described, comprising; an open end pouch formed of polyvinyl chloride material and defining an opposed flat unpolished exterior surface, with said pouch also having an opening provided in the end wall thereof that is opposed to said open end; a thin, elongate strap of plastic material received through said opening and having longitudinally spaced enlargements that restrict the amount of longitudinal movement of said strap in said opening; at least one planar face of said strap being polished whereby the same will adhere to either said unpolished exterior surface of said pouch upon being wiped into contact therewith; the wall thickness of said pouch being greater than the thickness of said strap.

2. The device of claim 1 further characterized by the fact that said strap is made of transparent vinyl material.

References Cited in the file of this patent

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UNITED STATES PATENT OFFICE

CERTIFICATE OF CORRECTION

November 10, 1959

Patent No. 2,912,030

William B. Stiller

It is hereby certified that error appears in the printed specification of the above numbered patent requiring correction and that the said Letters Patent should read as corrected below.

Column 4, line 31, after "defining" strike out -- an --; same line, for "surface" read -- surfaces --.

Signed and sealed this 3rd day of May 1960.

(SEAL)

Attest:

KARL H. AXLINE

Attesting Officer

ROBERT C. WATSON

Commissioner of Patents