Jan. 29, 1935. S. B. HEPPENSTALL, JR 1,989,516

PACKAGE FOR SAFETY RAZOR BLADES

Filed June 9, 1932

Fig. 2.

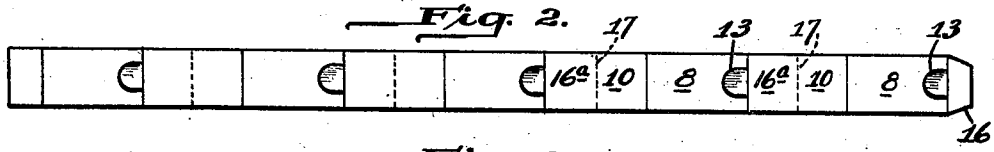


Fig. 3.

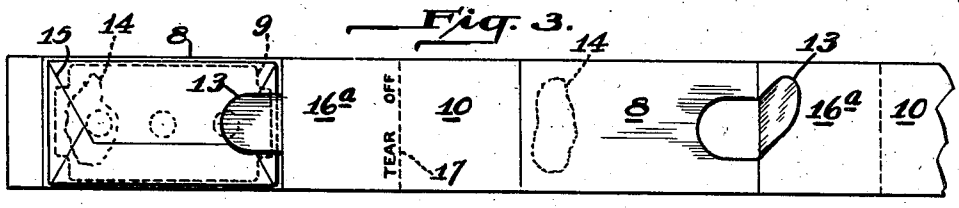


Fig. 4.

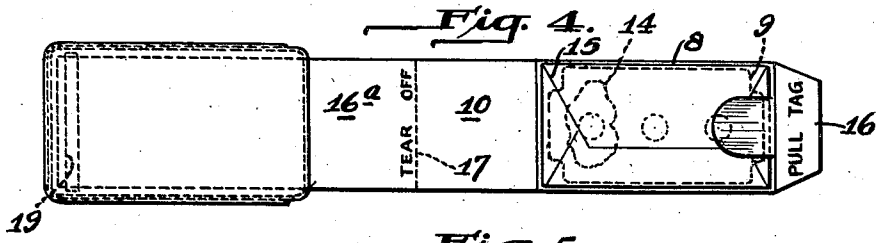


Fig. 5.

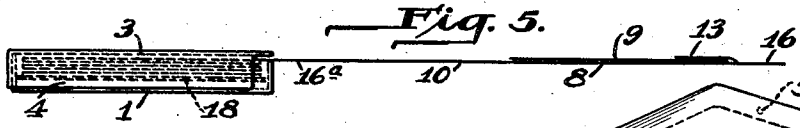


Fig. 6.

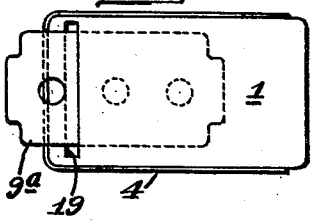


Fig. 1.

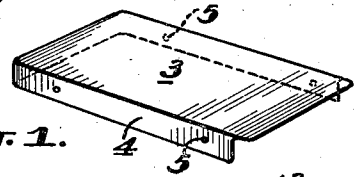


Fig. 8.



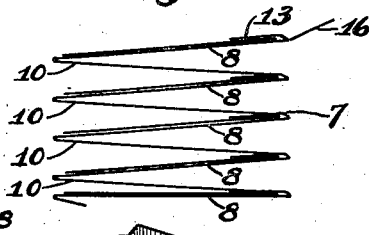
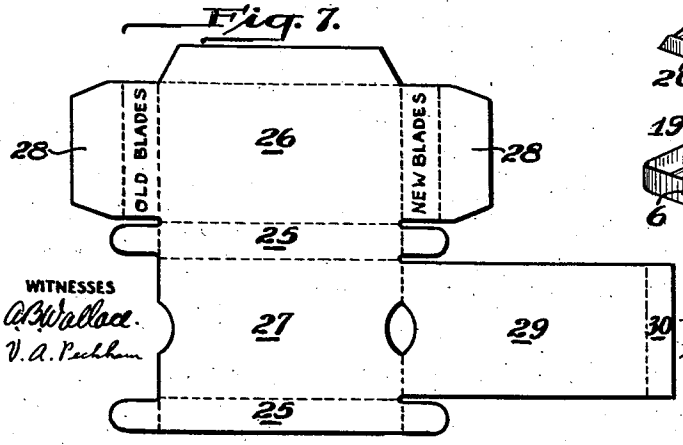
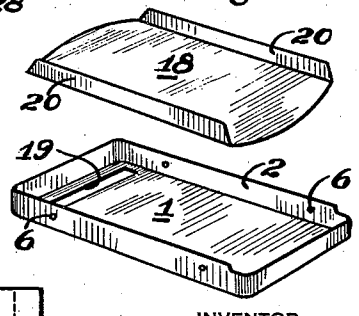


Fig. 7.





WITNESSES

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UNITED STATES PATENT OFFICE

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PACKAGE FOR SAFETY RAZOR BLADES

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Application June 9, 1932, Serial No. 616,191

1 Claim. (Cl. 206—46)

The invention relates to packages for safety razor blades.

The disposition of old blades is, in general, a troublesome problem to a great many users of safety razors, for that they cannot safely be thrown into a waste basket or other trash receptacle without exposing others, especially children, to the danger of being cut. Careful wrapping to avoid that danger is an inconvenience, especially since the need for discarding a blade commonly comes when the person is reluctant to take the necessary time. Formerly blades could be thrown into the toilet, since they would disintegrate by rusting in the trap; but with the present trend to non-rusting steels this mode of disposal is precluded.

Nor is it safe to replace such used blades in the conventional boxes in which new blades are sold, since with such boxes the new and old blades are commingled and there is considerable danger of being cut by the unwrapped old blades in removing a new blade. The boxes used prior to this invention were not particularly useful, therefore, in solving the problem of blade disposal, and they have been disadvantageous in that with them it has been difficult to withdraw a single blade. That is, it is necessary to shake the boxes to remove a blade, and this procedure usually causes several, or all, of the blades to fall out, additional time being consumed in replacing the excess blades.

It is among the objects of this invention to provide a razor blade package for dispensing new and safely disposing of used blades, which is provided with means for receiving and storing discarded blades separately from the supply of new blades, which prevents escape of old blades in withdrawing a new blade, minimizes the likelihood of placing old blades with the new blades, serves as a means for ready and safe disposel of the contained old blades when the supply of new blades has been exhausted, is simple and inexpensive, and which in the preferred embodiment is substantially no larger than ordinary blade packages, and supplies single blades according to need.

The invention is illustrated in the accompanying drawing of which Fig. 1 is a disassembled view of the preferred embodiment showing its component parts; Fig. 2 an unfolded plan view on a reduced scale of the tape shown in Fig. 1; Fig. 3 a fragmentary enlarged view of Fig. 2; Figs. 4 and 5 plan and side views, respectively of the package showing a single blade withdrawn; Fig. 6 a bottom view of the package showing its applicability to disposal of used blades; Fig. 7 a view of a blank used in making a modified form of package; and Fig. 8 a longitudinal vertical section of a package formed from the blank shown in Fig. 7.

In accordance with the invention the container which may be of conventional shape, is divided by a longitudinal partition into two sections each of which is provided with a blade-passing opening. One section receives new blades, and the other used blades, the partition separating the two sections so as to prevent commingling of old and new blades and thus to prevent used blades escaping with the new blades. In the preferred embodiment the partition separates the supply of new blades broadside from one wall of the case and initially lies closely adjacent to that wall, but is movable across the container so that as new blades are removed the partition is free to move to increase the used-blade receiving space. Preferably, also, the new blades are carried by a tape disposed in the case for successive withdrawal of individual blades, as will be described presently. In addition to acting as a new blade dispenser and used blade receiver of the type just referred to, the container also serves as a sealed receptacle for ready disposal of its enclosed used blades.

Having reference now to the preferred embodiment shown in Figs. 1 to 6, the package comprises a base 1, Fig. 1, having a continuous upstanding peripheral flange 2, and a cover 3 having a depending flange 4 adapted to telescope over flange 2. Base 1 and cover 3 are formed from rigid material, advantageously sheet metal, and they are connected in any suitable manner to form a sealed container, shown in Figs. 4 and 5, as by indentations 5 peened in flange 4 which engage similar detents 6 in flange 2.

Disposed within the container is an accordion-folded tape 7, Fig. 1, of uniform width and preferably formed from tough flexible paper, alternate folds 8 of which carry a succession of blades 9 mounted longitudinally of the folds. Between folds 8 the tape forms intermediate flexible connecting members 10, these folds being equal in length to folds 8. The blades are held in relatively fixed position by tabs 13 struck up from the forward end of folds 8, and by adhesive, indicated schematically at 14, Fig. 3, applied between the rear end of fold 8 and the protective wrapper 15, of waxed paper, or the like, within which the blades are enclosed.

Tape 7 is disposed with a free end 16 projecting through a slot formed in one end of the container.

The blades are removed from the case one at a time by pulling end 16 through the slot, whereupon the first fold 8 with its blade 9 is withdrawn, as shown in Figs. 4 and 5. The succeeding connecting fold 10 is also withdrawn, and the blade is detached by tearing fold 10 across a line of weakness 17 formed intermediate folds 8. This leaves an end 16a projecting through the slot for removal of the next blade. End 16 may be initially attached to the outside of the case in any suitable manner that permits of its being detached for pulling out the first blade. This construction thus provides for removal of only one blade at a time, the remaining blades being retained in the container until tension is applied to the leading, or intermediate, fold 10 to which they are immediately connected.

An important feature of the invention resides in the provision of means for ready disposal of old, or used, blades. To this end there is disposed in the container a partition member which separates tape 7 from one wall, and which forms with that wall a closed section for reception of used blades inserted through a slot formed in the wall for that purpose, the partition acting to maintain the old separate from the new blades, and to prevent the old blades from escaping through the slot from which new blades are withdrawn. Preferably the partition is movable, and is initially in contact, or substantially so, with the wall and the adjacent new blade. As each new blade is removed from the container the thickness of the pack of new blades remaining is reduced correspondingly, so that the partition may move away from the wall to provide a progressively increasing used blade section. In this manner the containers need be not appreciably larger than the conventional packages now in use.

One mode of realizing this feature is shown in Figs. 1 and 4 to 6, in which embodiment the lowermost fold of tape 7 rests against a loosely positioned partition member 18 extending longitudinally of the container between its side walls and initially bearing against the bottom wall. The uppermost fold of the tape lies against the top wall with its end 16 projecting through an end slot formed at the edge by omitting flange 4 and cutting the adjacent portion of flange 2 back slightly, as seen in Fig. 1.

Old blades are inserted into the container between bottom wall 1 and partition 18 through an aperture 19 provided for that purpose and positioned to prevent entry of the blades into the tape-carrying section. While this aperture may be positioned variously it is preferred to form it as shown in Fig. 1, to lie in the plane of the bottom wall. As an old blade 9a is inserted through aperture 19 (Fig. 6) it must bend slightly, since it passes from one plane to another parallel thereto. After the outer end of the blade has snapped through aperture 19 into the container it cannot thereafter escape through the aperture, because there is nothing to bend its end out of its plane to start it through the slot.

To prevent used blades deposited in the bottom of the case from escaping through the tape-withdrawal slot, partition 18 is provided with upright integral side flanges 20. These bear against cover 3 and limit the movement of the partition so as to prevent used blades beneath it from reaching the slot, even after all of the new blades have been removed.

A modified form of blade package embodying the invention is illustrated in Figs. 7 and 8. The container shown in Fig. 8 comprises sides 25 continuous with a bottom wall 26 and a top wall 27, and in-folding end-closure tabs 28, of conventional form, connected to one of the walls, e. g. 26. Connected to one end of the other wall, in this instance 27, is an extension 29 which is folded back along the wall interiorly to the other end, where it is folded to form a transverse flap 30 extending across the end beneath tab 28. This provides a new-blade section 31 accessible only through one end, and a section 32 for used blades accessible through the other end. As may be seen from Fig. 8, extension 29 acts as a partition to keep the new and old blades separate, and as in the preceding embodiment it can move across the container to receive additional used blades as the supply of new blades becomes depleted. Most suitably this container is formed from a single blank of foldable material, such as thin cardboard, a blank of appropriate shape being shown in Fig. 7 with its various portions numbered to indicate the portion of the completed container corresponding thereto.

Thus the invention provides a single container for packaging new razor blades and for reception of old blades, the latter being prevented both from commingling with the new blades and also from escaping when new blades are removed. Moreover, it provides a closed or sealed container enclosing such used blades, for safe, convenient and rapid disposal of old blades, eliminating the inconvenience and danger formerly attendant upon such disposal. In the preferred embodiment the package dispenses but a single blade at a time, which affords a distinct advance over prior packages. These features combine in a package of substantially the same size as those of the conventional pasteboard type used heretofore.

According to the provisions of the patent statutes, I have explained the principle and mode of operation of my invention and have illustrated and described what I now consider to represent its best embodiment. However, I desire to have it understood that, within the scope of the appended claim, the invention may be practiced otherwise than as specifically illustrated and described.

I claim:

A package for dispensing new and disposing of old razor blades, comprising a blade-receiving container, and a longitudinal partition member disposed in the container cooperating with its upper wall to form a new blade compartment and with the opposed lower wall to form a used blade compartment, an edge of the container being provided with a slot opening into said new blade compartment for withdrawal of individual new blades therefrom, and said bottom wall being provided with a narrow transverse aperture adjacent to but spaced from one end of the container so that used blades are bent slightly in passing into said used blade compartment, said partition and the position of said aperture acting to prevent the escape of used blades from said slot and aperture, respectively, and the container acting as a sealed means for disposing of used blades when its supply of new blades has been exhausted.

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