

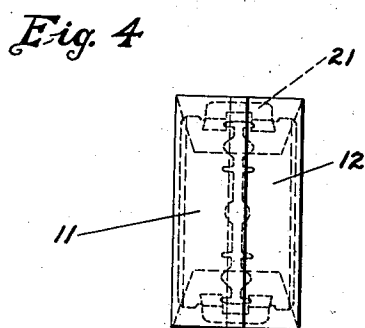
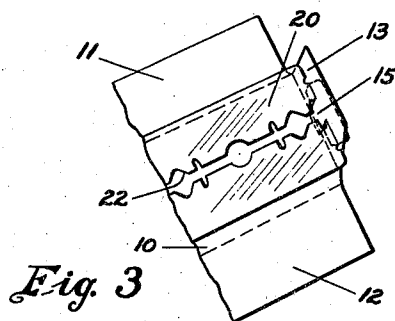
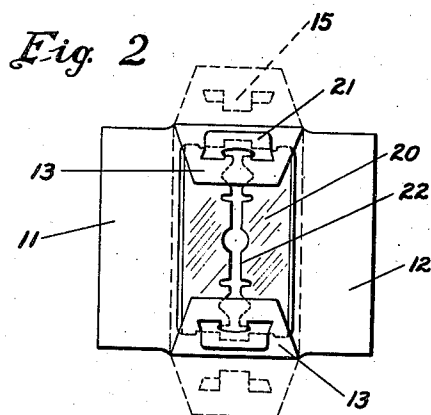
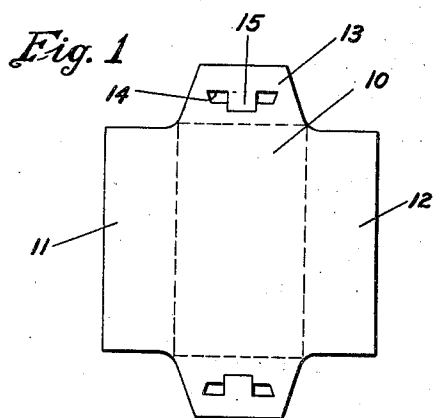
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PROTECTED BLADE

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PROTECTED BLADE

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4 Claims. (Cl. 206—46)

This invention relates to the packaging of fine edged blades, such for example, as safety razor blades. In one aspect it consists in an apertured blade protected by a wrapper of sheet material and anchored against displacement therein by a novel form of interlocking engagement with apertured or perforated portions of the blade.

In handling safety razor blades under commercial conditions of transportation and distribution and in the more or less casual treatment of such blades by the user, the extremely fine, keen edge of the blade is likely to become dulled by being brought into contact with its wrapping either at a fold vertex or by being drawn across or cutting the wrapper in being removed therefrom. On this account the best and most skillful efforts of the manufacturer in sharpening blades are often brought to naught, because of the damage done to the fragile and delicate structure of the blade edge after it has been brought to the keenest possible shaving condition and before the shaving operation is actually undertaken.

The invention is herein shown in its application to a well-known and commercial type of apertured double-edged safety razor blade having shouldered and unsharpened end portions. It will be understood, however, that the invention is not limited to this nor to any other specific type of blade. More especially I contemplate a double interlock between folded cover portions of the wrapper and both external edges of the blade ends and an internal aperture or perforation in the blade. For example, tabs of the wrapper may be slotted to receive the shoulders of the blade ends and tongues may be provided for insertion through adjacent apertured portions of the blade. This provides a double interlocking engagement between the blade and wrapper such that the blade is held in predetermined position therein and out of contact with all fold vertices of the wrapper and also in such position that it may be removed from the wrapper without danger of its cutting edges being scuffed upon any part thereof.

These and other features of the invention will be best understood and appreciated from the following description of a preferred embodiment thereof, selected for purposes of illustration and shown in the accompanying drawing, in which—

Fig. 1 is a plan view of the wrapper;

Fig. 2 is a plan view of the wrapper with its end tabs closed upon a blade;

Fig. 3 is a view in perspective showing one end of the blade engaged with an end tab of the wrapper; and

Fig. 4 is a plan view of the wrapper completely closed upon the blade, the latter being shown in dotted lines.

The wrapper which may be made of thin sheet material, such as oiled or waxed paper is shown in Fig. 1 as comprising a rectangular body portion 10 scored to define side flaps 11 and 12 and end tabs 13. Each end tab 13 tapers outwardly to a straight end edge and is provided at a point above its fold line with a transverse slot 14. The end edges of these slots converge somewhat in a downward direction. Within the area of each end tab 13 is outlined a tongue 15 extending from the upper edge of the slot 14 downwardly across the slot and toward the fold line of the tab, being substantially longer than the width of the slot 14. The tongue 15 is scored at its upper edge to facilitate being inwardly deflected preparatory to engaging the blade. The slot 14 is designed to receive and make interlocking engagement with the exterior shouldered edges of the blade and the tongue 15 is designed to make interlocking engagement with an internal edge of a blade aperture, as will be presently explained.

The wrapper shown in Fig. 1 is designed particularly for use in combination with blades of the type shown in Figs. 2, 3 and 4 but it will be understood that the shape of the wrapper may be modified in accordance with blades of other contour or pattern should it be desired to protect such in accordance with the present invention.

The blade 20 herein shown is provided with oppositely disposed longitudinal cutting edges and with reentrant corner notches providing elongated unsharpened end portions 21 in the blade. The blade is also shown as provided with a central aperture 22 in the form of a slot substantially as long as the cutting edges of the blade and having transverse end edges of substantial length.

In enclosing the blade 20 the end tabs 13 of the wrapper are turned into upstanding and substantially parallel relation, as suggested in Fig. 3, and at the same time the tongues 15 are bent inwardly. The tongues are thus arranged to be inserted downwardly into the opposite transverse ends of the aperture 22 of the blade. At this stage, the blade is instantaneously supported above the body 10 of the wrapper by a distance equal to the height of the slot 14 above the fold line of the tabs 13. As the tabs 13 continue to be folded inwardly the blade 20 is lowered upon the surface of the body portion 10 of the wrapper and the end portions 21 of the blade pass

fully through the slots 14 so that its end edges engage the side edges of the elongated end portions 21 of the blade and the transverse shoulders of the blade engage the flaps outside the ends of the slots 14. The tongues 15 also pass fully into the ends of the aperture 22 and thus positively hold the blade against longitudinal displacement. In other words, each tongue, though now lying in flat condition, has been threaded through one end of the aperture and the end edge of the aperture engages the root of the tongue in such a manner that the blade cannot be moved longitudinally away from either tongue without distorting or tearing the wrapper. The tongue also tends to prevent lateral displacement of the blade in the wrapper and movement in this direction is also positively prevented by engagement of the side edges of the end portions 21 with the end edges of the slots 14. It will thus be seen that a double interlock has been formed between the external edges of the end portion 21 of the blade and the tabs 13, on the one hand, and the interior edges of the aperture 22 and the tongues 15, on the other hand. The blade is accordingly fixed securely in predetermined position out of contact with all fold lines of the wrapper and on account of this double interlocking engagement its position is reliably maintained even though the wrapper may be of thin and easily folded material possessing little strength in itself.

Having thus disclosed my invention and described a preferred embodiment thereof for purposes of illustration, but not by way of limita-

tion, I claim as new and desire to secure by Letters Patent:

1. A protected blade having therein a flat ended aperture and being enclosed in a wrapper provided with an end portion folded over the blade on a fold line parallel to and beyond the end edge of the blade, and a tongue located within the area of said folded end portion, extending toward the fold line thereof and engaging at its root against the flat end of the aperture.

2. A protected perforated blade having shouldered end portions and being enclosed in a wrapper having tabs slotted and receiving the shouldered end portions of the blade, and tongues entering a perforation of the blade adjacent to its shouldered ends.

3. A protected blade having shouldered end portions and an elongated internal aperture, and being enclosed in a wrapper having folded end tabs provided with transverse slots for receiving the reduced blade ends and tongues extending inwardly from the ends of said tabs, crossing the slots therein and passing through opposite ends of the blade aperture.

4. A double-edged safety razor blade having elongated unsharpened end portions of reduced width and an aperture of substantially the same length as its cutting edges, said blade being enclosed and anchored within a wrapper having end tabs shaped to interlock both with the outer edges of the reduced end portions of the blade and with the ends of its aperture.

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