May 31, 1949.

J. H. HARRIS EXPENDABLE RAZOR Filed May 28, 1945

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UNITED STATES PATENT OFFICE

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EXPENDABLE RAZOR

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4 Claims. (Cl. 30-47)

This invention relates to safety razors and more particularly to safety razors which, by virtue of the nature of material used and the construction thereof, are expendable.

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The principal objects of the invention are, 5 first: to provide an expendable safety razor or blade holder produced from water resistant material; second: to provide such a blade holder for accommodating conventional blades; third: to provide an expendable blade holder produced 10 from a preformed blank of waxed material having the prerequisites for drainage of moisture from the blade receptacle; waxing of the blade to preserve the same for reuse and apertures forming castellations, when folded, to define a 15 guard for the blade.

The foregoing characteristics are chief among the objects of the invention but of equal importance is the collapsibility of the blade holder in folded form to a length and width but slightly 20 greater than the length and width of a conventional safety razor blade so that the holder, in compact form may be dispensed from a suitable vending machine located in hotel rooms, wash rooms or other places accessible to travelers as 25 a matter of convenience. Moreover, in such compact form, the blade holders equipped with blades may be conveniently packaged for sale to the consumer for domestic use.

With the foregoing objects as paramount, the 30 invention has further reference to certain features of accomplishment which will become apparent as the description proceeds, taken in connection with the accompanying drawings wherein:

Figure 1 is a plan view of a pre-cut blank, foldable to form the blade holder and handle.

Figure 2 is a similar view but showing the blank partially folded.

razor.

Figure 4 is a perspective view of the razor collapsed, and

Figure 5 is a fragmentary side view of the razor greatly enlarged and in vertical section.

Continuing with a more detailed description of the drawing, reference is primarily made to Figure 1 wherein ic denotes a blank of waxed paper or card-board of sufficient strength or weight that it will retain its shape when folded 50and by virtue of the waxed surfaces thereof, will resist water. It is obviously possible to produce the blank from other materials such as pliable plastic which is inherently moisture proof.

mediate strip 11 of material which, in the case of paper, is laminated to enclose two or more reinforcing wires 12 which are coextensive and in parallel relationship. The material of which these wires are made is malleable or pliable and remains in the shape formed thereby. It is preferred that the wires be so spaced with respect to each other that one will lie along one edge of the elongated or intermediate strip 11 while the other extends through the center thereof. The purpose of these reinforcing wires is to prevent back spring of the sections of the blank 10 when they are folded in the manner to be presently explained.

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Formed integrally with the intermediate section 11 in cutting are side sections 13 and 14, the latter being shorter in length than the former but each may be said to be parallel with the intermediate section 11.

To form the body of the razor or the blade holder, the side section 14 is folded on line aonto the half portion b of the section ||, defined by the longitudinal dotted line c of the latter. The opposite side section 13 is folded onto the companion half portion d of the intermediate section 11 along dotted line e. Then, the half portions b and d of the intermediate section ||are folded one upon the other along dotted line c, to enclose the side sections 13 and 14, in the manner shown in Figure 2.

Before the folding operations described, or during the stamping of the blank 10, apertures 15 are made in the intermediate section 11, half in portion b and half in portion d so that when 35 these portions are folded along line c, the apertures will appear semi-circular, as shown in Figures 2, 3 and 4. The purpose of these apertures will be presently explained. Also preformed in the blank are smaller apertures 16 which Figure 3 is a perspective view of the complete 40 straddle the folding line a between the intermediate section 11 and the side section 14. These latter apertures form the guard, as shown in Figures 3 to 4.

Having folded the side sections 13 and 14 onto 45 the intermediate section 11 and the portions band d of the latter onto each other, it will be noted that the edge formed by the folded line aextends slightly beyond that formed by the fold e, defining portion d of the section 11 which lies immediately over the section 14. By making portion b of section 11 wider than the companion portion d, corresponding in width to side section 14, the foregoing result is attained and it is apparent that the cutting edge of a blade 17, The blank 10 consists of an elongated inter- 55 when the latter is inserted between the folds of underlying sections 13 and 14, will extend beyond the former to overlie the servations or castellations formed by the closely spaced holes 16.

To form the head and handle of the blade holder, the body just described is further folded 5 transversely. The first transverse folds f and gare made to define the head or blade holding pocket as to length. The handle is formed by breaking the body transversely along broken lines h and i, next adjacent lines f and g, and secur- 10 ing by means of a staple s.

To join the two extremities of the body together, it will be noted in Figures 1 and 2 especially that the laminations of the body are reduced to two at one end and to three at the opposite end thereof while the midsection has four laminations. When in folded form, the end of the intermediate section 11 having two laminations is folded on transverse line j to form a tab 18, which is thrust between the laminations of the opposite end 19 of the body, as exemplified in Figure 3, which shows the completed blade holder or razor.

In order to hold the blade **17** against displacement from the pocket described in the foregoing, 25 any suitable means, such as a wire staple **20** is fastened in the head or blade pocket, whose legs pass through the apertures **21** (Figure 5) of the conventional blade **17**, and are clenched underneath the head at **22**.

It is intended that razors or blade holders such as described in the foregoing be of such nature that they may be dispensed singly from a vending machine. To make this possible, the parallel portions of the handle are oppositely scored transversely on lines k so that they will break outwardly and thus permit the handle to be collapsed to the compact form shown in Figure 4. In this form, the blade holder containing the blade may be packaged preferably in a moisture tight wrapper or container and dispensed in this form from a coin operated machine of any conventional and suitable design for immediate use.

When the wrapper is removed from the blade holder, the handle of the latter is extended by 45pressing on the folded points k, after which the razor is used in the customary manner of shaving.

Should it be desired to cleanse the razor for reuse before casting it away, it is held under a running water tap or otherwise washed, afterwards permitting water to drain from the blade pocket through apertures 15. The head and handle may be wiped to remove clinging moisture and the thumb of one hand passed across the top of the head towards the exposed edge of the blade 17 to distribute thereover a thin film of wax transferred from the wax coated surface of the material forming the body of the device. The blade edge will thus be preserved for reuse. 60

Manifestly, the construction as shown and described is capable of some modification and such modification as may be construed to fall within the scope and meaning of the appended claims is also considered to be within the spirit and 65 intent of the invention.

What is claimed is:

1. An expendable razor including a blade pocket and a handle formed of a blank of moistureproof material comprising a rectangular intermediate section and rectangular side sections of shorter length than the intermediate section, one

side section being of greater width than the other side section and being folded onto its companion half portion of the intermediate section, and the other side section being folded onto its companion half portion of the intermediate section whereby their abutting edges are offset from the axis of the intermediate section; the intermediate section being folded longitudinally along the abutting edges of the folded side sections to enclose the side sections, the wider side section having a series of perforations in the line of fold to form a razor blade guard; the blank thus formed being folded transversely at predetermined points to define a blade receiving pocket; a blade in said of the folds of the intermediate section; the last named folds being secured to the pocket portion: the opposed ends of the blank being folded outwardly at their line of abutment at the center of the pocket portion; and the outer ends of the blank being secured together to form a handle portion.

2. In a razor as set forth in claim 1, said ends of the handle portions being secured by folding the end of one handle portion to form a tab and inserting same into the laminations of the other handle portion.

3. An expendable razor including a blade pocket and a handle formed of a blank of moistureproof material comprising a rectangular intermediate section and rectangular side sections of shorter length than the intermediate section, one side section being of greater width than the other side section and being folded onto its companion half portion of the intermediate section, and the other side section being folded onto its companion half portion of the intermediate section whereby their abutting edges are offset from the axis of the intermediate section; the intermediate section being folded longitudinally along the abutting edges of the folded side sections to enclose the side sections, the wider side section having a series of perforations in the line of fold to form a razor blade guard; the blank thus formed being folded transversely at predetermined points to define a blade receiving pocket; a blade in said pocket having its edge exposed at the narrower of the folds of the intermediate section; the last named folds being secured to the pocket portion: the opposed ends of the blank being folded outwardly at their line of abutment at the center of the pocket portion; the outer ends of the blank being secured together to form a handle portion; and the outwardly extending handle portions at their mid-points being scored whereby the handle portions may break outwardly when collapsed to closely overlie the pocket portion.

4. In a razor as set forth in claim 3, said ends of the handle portions being secured by folding the end of one handle portion to form a tab and inserting same into the laminations of the other handle portion.

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REFERENCES CITED

The following references are of record in the file of this patent:

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