June 17, 1924. 1,497,940

J. B. REINHART

PACKAGING RAZOR BLADES

Filed Oct. 21, 1922

Fig. 1.

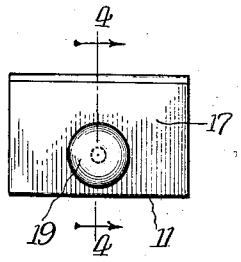

Fig. 2.

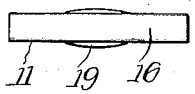

Fig. 3.

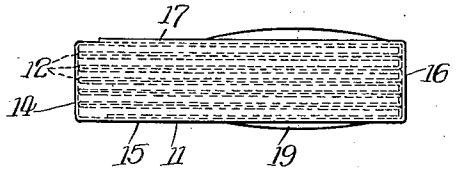

Fig. 4.

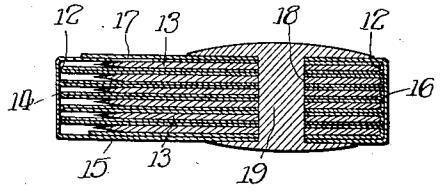

Fig. 5.

Witness:
A. J. Sauser.

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UNITED STATES PATENT OFFICE.

JOHN B. REINHART, OF ST. LOUIS, MISSOURI, ASSIGNOR TO TWINPLEX SALES COMPANY, OF ST. LOUIS, MISSOURI, A CORPORATION OF DELAWARE.

PACKAGING RAZOR BLADES.

Application filed October 21, 1922. Serial No. 595,917.

To all whom it may concern:

Be it known that I, JOHN BRYANT REINHART, a citizen of the United States, residing at St. Louis and State of Missouri, have invented certain new and useful Improvements in Packaging Razor Blades, of which the following is a specification.

The present invention pertains to the packaging or wrapping in proper or suitable receptacles of bodies, such as razor-blades, having sharp edges to be maintained against becoming dulled or injured through contact with other elements or due to the corrosive action of the atmosphere thereon.

Of course, it is not novel to wrap or accommodate razor-blades or the like in paraffined paper or in envelopes or containers of similar moisture-proof material, but my invention goes further than that in that the razor-blades are secured in hermetically sealed receptacles in such a manner that there is no danger of their sharp keen edges coming in contact with anything and hence become marred or impaired.

A further purpose of the invention is to package or wrap up blades in such a manner that they may be readily removed one by one without disturbing or breaking the seals of the others.

To this end, in the preferred embodiment of the invention, the blades are held or housed in pockets between the sections of a zig-zag shaped or the like folded paraffined paper and maintained against displacement by a paraffin rivet or rod which extends through registering holes in the blades and the leaves or sections of the paper, the terminal part of the latter being desirably folded around so as to complete the wrapper and wholly enclose the blades.

To enable those skilled in this art to have a full and complete understanding of the invention and its several structural and functional advantages, in the accompanying drawing forming a part of this specification, I have illustrated a preferred embodiment of the invention and throughout the several views of this drawing like reference characters have been employed for the same parts.

In this drawing:

Figure 1 is a face view of the package containing the razor-blades;

Figure 2 is a longitudinal edge view of the same;

Figure 3 is an end view of the package showing the same on an enlarged scale;

Figure 4 is a transverse section on an exaggerated scale on line 4—4 of Figure 1; and

Figure 5 shows the package in perspective partly undone exposing one of the razor-blades.

Referring to this drawing, it will be seen that the paraffined paper wrapper or container 11 is folded upon itself at 12 at a plurality of equally-spaced joints to provide double-thickness side-walls, as shown in Figures 3, 4, and 5, between the individual, flat, sharp-edged razor-blades 13, six of which are shown accommodated in this manner in the drawing.

Thus the strip of folded or plaited moisture-proof paper forms six pockets of suitable size for the reception of the blades, the back or unsharpened edges of the latter desirably engaging the inner or bottom walls of such pockets or cavities.

The portion of the paper forming the upper wall of the top pocket is folded down at 14 across, and thus closes, the mouths or entrances to such pockets.

It then extends across the bottom of the container at 15, and upward at 16 across the backs of the pockets, and then forwardly at 17 across the top of the container.

The several contacting layers or folds of the paper are desirably adhered together by the paraffin with which the paper is impregnated so that the receptacle constitutes a firm, closed, moisture or weather-proof wrapper protecting its contents in individual pockets against the action of the atmosphere.

To seal the ends of the wrapper, they may be merely coated with paraffin or other appropriate material or the projecting end parts of the paraffined paper may be squeezed together and caused to adhere thus closing the ends of the receptacle.

To maintain or hold the blades in the positions indicated with their sharp edges out of contact with the encasing or enclosing paper, the blades and the several superposed folds or sections of the plaited paper are apertured or perforated in register or alinement at 18 and this hole is filled with a confining paraffin rod or rivet 19 with heads 20 and 21 on the outer faces of the receptacle or package.

By this simple means dislodgment or displacement of the blades in their pockets is effectively prevented and the retention of the sharpness of their cutting edges assured.

The paraffin rivet also acts to assist in holding the parts of the wrapper together and to prevent its unintentional unfolding.

When it is desired to take out a blade for use, any one or more of them may be readily removed from the package by unfolding the paper wrapper sufficiently for the purpose without disturbing the other blades or their sealed pockets until they are needed, and, in the meantime, the undone portion of the paper may be rewrapped around them until they in turn are removed from the package.

The paper of the original wrapper is not only held from becoming unfolded or unwrapped by its paraffin coating but the blade-retaining rivet assists, as will be understood, in performing this function.

The container, therefore, consists of only two elements, paper and paraffin, both of which conjointly act to preserve the blades in proper condition and to protect them from the action of the atmosphere, the paraffin rivet of course assisting in holding the blades in place so that their sharp edges can touch no part of the confining wrapper.

The invention is not limited and restricted to the precise and exact details of structure shown and described and these may be modified within comparatively wide limits without departure from the heart and essence of the invention and without the sacrifice of any of its substantial benefits and advantages.

With obvious modifications the receptacle or container may be employed satisfactorily with double-edge blades, the sharpness of both of which edges it is desirable to preserve.

Although I have specifically mentioned paper and paraffin, these are only examples of suitable materials, others being as serviceable under proper conditions.

In the production of these packages and their reception of the blades, the paper is folded to form the pockets and simultaneously the blades are fed into place with their back edges against the bottom or rear walls of the pockets and with their holes in line with those of the wrapper.

When the paper folding and blade inserting operations have been completed, melted paraffin is poured into the registering apertures to form the blade-holding rod or rivet which also prevents the paper from unfolding or unwrapping until such action is desired.

I claim:

1. In a container of the character described, the combination of an apertured folded sheet forming a pocket, an apertured sharp-edged body in said pocket with its aperture in register with that of said folded sheet, and independent means extended through the registering apertures of said body and folded sheet to retain the former with its sharp edge inwardly away from the corresponding edge of the pocket.

2. In a container of the character described, the combination of an accordion-plaited wrapper sheet forming a plurality of pockets between its folded sections, the latter having aligned apertures, apertured sharp-edged bodies in said pockets with their apertures in register with the wrapper apertures, and independent means extended through the registering apertures of said bodies and wrapper sections holding said bodies against displacement in said pockets with their sharp edges positioned inwardly away from the corresponding edges of the pockets.

3. In a container of the character described, the combination of an apertured folded sheet forming a pocket, an apertured sharp-edged body in said pocket, and a paraffin rod extended through the registering apertures of said body and folded sheet to retain the former from displacement in the pocket.

4. In a container of the character described, the combination of an accordion-plaited wrapper sheet forming a plurality of pockets between its folded sections, apertured sharp-edged bodies in said pockets, and a paraffin-rivet extended through the apertures in said bodies and registering holes in said wrapper sections holding said bodies against displacement in the pockets.

5. In a container of the character described, the combination of a paraffin-coated, accordion-plaited wrapper-sheet forming pockets between its folded sections, apertured sharp-edged bodies in said pockets, and a paraffin rod extended through the apertures of said bodies and registering holes in said wrapper section holding said bodies against displacement in the pockets.

6. In a container of the character described, the combination of a paraffin-coated, accordion-plaited wrapper-sheet forming pockets between its folded sections and having a part extended across the mouths of said pockets, apertured sharp-edged bodies in said pockets, and a paraffin rod extended through the apertures of said bodies and registering holes in said wrapper sections holding said bodies against displacement in the pockets.

7. In a container of the character described, the combination of an accordion-plaited wrapper-sheet forming pockets between its folded section and having a section extended across and closing the mouths of said pockets and an end section overlying the outer wall of one of said outer

pockets, apertured sharp-edged bodies in said pockets, and a paraffin rivet extended through the apertures of said bodies and registering holes in said wrapper-sections holding said bodies against displacement in the pockets and holding the end section of the wrapper in position.

8. In a container of the character described, the combination of means forming a pocket, a sharp-edged apertured blade in said pocket, and readily meltable means fixed with relation to said pocket and extended through said blade aperture maintaining the sharp edge of the blade free from contact with any body thus preserving its cutting qualties.

9. In a container of the character described, the combination of an apertured folded wrapper sheet forming a plurality of aligned pockets with registering apertures in their walls, sharp-edged blades in said pockets having holes through them in line with said registering apertures, and a readily meltable member extended through said blades holes and said wrapper apertures maintaining the sharp edges of the blades free from contact with any body thus preserving their cutting qualities.

10. In a razor-blade container of the character described, the combination of an encasing material forming a receptacle for an apertured razor-blade, said material being impregnated with a moisture-proofing substance, and a holding member made of said moisture-proofing substance extended through the aperture of the razor-blade to hold the latter in position in said receptacle.

In witness whereof I have hereunto set my hand and seal.

JOHN B. REINHART. [L. S.]