PATENT SPECIFICATION

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494,129
No. 24872/37.

COMPLETE SPECIFICATION

Improvements in or relating to Magazine for Razor Blades

We, MAGAZINE REPEATING RAZOR COMPANY, a corporaton organized under the laws of the State of New Jersey, one of the United States of America, of No. 230, Park Avenue, in the City of New York, State of New York, United States of America, Assignees of OCTAVIUS VICTOR RODRIGUES, a subject of the King of Great Britain, of No. 455, Passaic Avenue, Passaic, State of New Jersey, United States of America, do hereby declare the nature of this invention and in what manner the same is to be performed, to be particularly described and ascertained in and by the following statement:—

The invention relates to an improved magazine for razor blades, of the type provided with means for ejecting the blades one by one, and as they are ejected, feeding them to position in a razor. The essential characteristics of a device of this known type are a box-like receptacle or casing open at one end, and closed at the other end within which is inserted a clip or holder containing a stack of blades, provision being made for ejecting the blades one by one through a slot in the closed end and locating then in a razor head in proper position for shaving. A device of this type is described in our English Patent Specification No. 430,063 dated July 20, 1933.

The object of the invention, herewith stated, is to provide improvements in the above type which makes it difficult to remove a blade clip from the magazine without destroying it or parts of it to an extent which will inhibit its further use for its intended purposes.

By utilizing the invention it is possible to dispense blades sealed up in the magazine and in most cases to prevent the insertion in the same magazine of a second supply of blades, thus compelling the user to discard the magazine when its first loading has exhausted. Consequently, the razor producer may be assured that only blades of his own make or of his selection shall be used in connection with his razor, and he thus avoids the damage to the reputation of his razor, which would be almost certain to arise from the sale by others of cheap and inferior blades.

[*Price* 1/-]

The improved blade magazine according to the invention comprises a casing of transverse channel section adapted to contain a blade holder and wherein an end of the casing is permanently closed by a wall and its opposite end provided with a lug projecting inwardly from a wall of the casing, the side walls of the casing being formed by the channel legs are inturned at the edges leaving a gap between them and closed by a cover plate affixed to the casing.

Referring to the accompanying drawings,

Fig. 1 is a perspective view of the magazine;

Fig. 2 is a view, in section, on the line 2—2 of Fig. 1;

Fig. 3 is a view, in section, on the line 3—3 of Fig. 1;

Fig. 4 is an end view of the magazine, and observed from the left of Fig. 1;

Fig. 5 is a cross-section view on the line 5—5 of Fig. 2;

Fig. 6 is an end view of the magazine, and observed from the right of Fig. 1;

Fig. 7 is a perspective view of the plunger by means of which the blades are ejected.

The magazine illustrated in the drawing is a preferred embodiment of the invention and it comprises an elongated, box-like structure of channel section transversely, in which a clip containing a number of blades may be inserted and from which extends a projection finger 10, the function of which is to align the magazine with the razor, as described in British Specification No. 430,063 above referred to. The box-like structure, or casing comprises what may be referred to (with reference to the orientation of the device as it appears in Fig. 1) as a top portion 11, an end portion 14, and two side portions 12 and 13, inturned along a line parallel to and slightly remote from their edges, all of which may be formed from a single blank of sheet metal of a suitable pattern. Preferably a gap or slot is left between these edges through which the spring 28 hereinafter mentioned protrudes. The casing may, if the device is to be used in the manner shown in British

Specification No. 430,063 be provided as above stated with the finger 10 which, in turn, is provided with the projection 15 and the projection 16. The primary purpose of these two projections 15 and 16 is that of co-acting with the razor to properly open the blade channel of the latter to receive a blade, but, in addition, the projection 16 also performs a function that is related to the invention and which will be later referred to. It will be obvious that the clip 18, whether containing a stack of blades indicated as a whole by the numeral 19 or empty, cannot by reason of the presence of the inturned edges 17 be removed by extracting it through the bottom of the casing. The same would be true even if the edge of only one side were inturned. Neither can the clip be extracted through the front of the casing by virtue of the closure constituted of the end wall 14, but even if the end wall 14 be bent so that the end is open, the projection 16 offers a further positive obstacle to removal of the clip—i.e., unless the finger 10 also be bent aside. If it is intended to make use of the projection 16 as an obstacle to the extraction of the clip in this manner, it is preferable that the clip should fit the casing closely. Extraction of the clip through the rear end of the casing is effectively prevented by the lug 20 which may be, and preferably is, provided by striking in by means of a punch, a small area of the stock in one of the sides, leaving it however attached along one edge. In assembling it is preferable that the entire casing be formed except the lug 20, the clip loaded with blades inserted and the lug 20 then struck in.

We thus have a casing containing a clip for holding a stack of blades which cannot be extracted without removing the obstructions created by the end wall 14, the projection 16, and the lug 20. Removal, breakage or distortion of these parts, while possible with special tools, is not feasible for the ordinary razor user, and in any event the operation would result in distortion or mutilation of the casing, rendering it unavailable for further use. The same result would occur if it were attempted to extract the clip from the casing by forcible spreading the sides of the latter.

The bottom of the magazine, which is also part of the casing, consists of a cover plate 21 preferably turned up at its edges as shown at 22, and folded over the inturned edges 17 of the side walls, as shown at 23 and 23*a*.

It will thus be seen that an attempt to remove the clip without mutilation or distortion of the casing is not in any way helped by removing the cover plate. In other words, removal of the cover plate does not in any way help in the removal of the clip, if it is desired that the removal is to be accomplished without rendering the magazine unusable.

The obstacles to removal of the clip may be increased by forming them from stock that is capable of withstanding very little bending or working. To this end brittle stock may be selected and if possible stock so brittle that the lug 20 cannot be bent back out of the way of the clip without rupture along the line of bend or at any rate cannot be bent to its original position and then restored to its position of projection without such an effect. The desired results may be still further approached by using thick stock since the thicker the stock of a given grade the less bending will it stand. Not only would the same difficulties arise as in the case of the lug 20 in case it were attempted to bend the projection 16 out of the path of the clip, but even were the attempt successful it would not be feasible to restore it to its original shape without the use of special dies, and thus the function of the finger 10 would be lost or impaired.

The parts shown in the drawing, which have not been referred to above, while not essentially related to the invention, will be briefly referred to in order that the description of the device shall be complete.

The means for ejecting the blades from the stack comprise a plunger 24 located in the magazine and connected through the slot 25 to a finger piece 26 by means of a connecting piece 27. When the plunger is drawn to the extreme rear—that is, to the right, as shown in Figs. 1, 2, and 3—the spring 28 forces the entire stack 19 of blades upwardly, thus interposing the rear end of the blade *a* in the path of the plunger, and then when the plunger is moved forwardly—that is, to the left with reference to Figure 1—through a full stroke, the blade *a* is ejected through the orifice 29 of the magazine, and if the magazine is properly lined up with a razor, the blade will be inserted in the blade channel of the latter. The operation is of course repeated until the supply is exhausted as often as it is desired to insert a new blade in the razor.

From the foregoing description it will be seen that the invention makes possible an effective way of preventing the indiscriminate selling of cheap and inferior razor blades, with the necessary result of discrediting the producer of the razor with which they are to be used.

Having now particularly described and ascertained the nature of our said inven-

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The obstacles to removal of the clip may be increased by forming them from stock that is capable of withstanding very little bending or working. To this end brittle stock may be selected and if possible stock so brittle that the lug 20 cannot be bent back out of the way of the clip without rupture along the line of bend or at any rate cannot be bent to its original position and then restored to its position of projection without such an effect. The desired results may be still further approached by using thick stock since the thicker the stock of a given grade the less bending will it stand. Not only would the same difficulties arise as in the case of the lug 20 in case it were attempted to bend the projection 16 out of the path of the clip, but even were the attempt successful it would not be feasible to restore it to its original shape without the use of special dies, and thus the function of the finger 10 would be lost or impaired.

The parts shown in the drawing, which have not been referred to above, while not essentially related to the invention, will be briefly referred to in order that the description of the device shall be complete.

The means for ejecting the blades from the stack comprise a plunger 24 located in the magazine and connected through the slot 25 to a finger piece 26 by means of a connecting piece 27. When the plunger is drawn to the extreme rear—that is, to the right, as shown in Figs. 1, 2, and 3—the spring 28 forces the entire stack 19 of blades upwardly, thus interposing the rear end of the blade *a* in the path of the plunger, and then when the plunger is moved forwardly—that is, to the left with reference to Figure 1—through a full stroke, the blade *a* is ejected through the orifice 29 of the magazine, and if the magazine is properly lined up with a razor, the blade will be inserted in the blade channel of the latter. The operation is of course repeated until the supply is exhausted as often as it is desired to insert a new blade in the razor.

From the foregoing description it will be seen that the invention makes possible an effective way of preventing the indiscriminate selling of cheap and inferior razor blades, with the necessary result of discrediting the producer of the razor with which they are to be used.

Having now particularly described and ascertained the nature of our said inven-

tion and in what manner the same is to be performed, we declare that what we claim is:—

1) In a magazine for dispensing razor blades comprising a casing of transverse channel section and adapted to contain a blade holder, the arrangement in which one end of the casing is permanently closed by a wall and its opposite end provided with a lug projecting inwardly from a wall of the casing, the side walls of the casing being formed by the channel legs which are inturned at the edges leaving a gap between them and closed by a cover plate affixed to the casing.

2) A magazine as claimed in claim 1 wherein a finger, adapted to co-act with the razor and projecting from one end of the casing, is provided with a lug positioned to obstruct movement of the blade-holder from the casing when its permanent closure is removed.

3) A magazine as claimed in claim 1 or 2, characterized in that the casing is made of a material of such a nature that it is incapable of withstanding more than right-angle bend.

4) A magazine as claimed in any one of the foregoing claims, characterized in that the lug obstructing movement of the blade holder towards the opposite end of the casing is struck in from a wall of the casing.

5) A magazine constructed and arranged substantially as described with reference to the accompanying drawing.

Dated the thirteenth day of September, 1937.

HASELTINE LAKE & CO.,
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19, West 44th Street, New York, N.Y., U.S.A.,
Agents for the Applicants.

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