H. S. HASSELQUIST.

ADJUSTABLE RAZOR BLADE GUARD.

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Fig. 1.

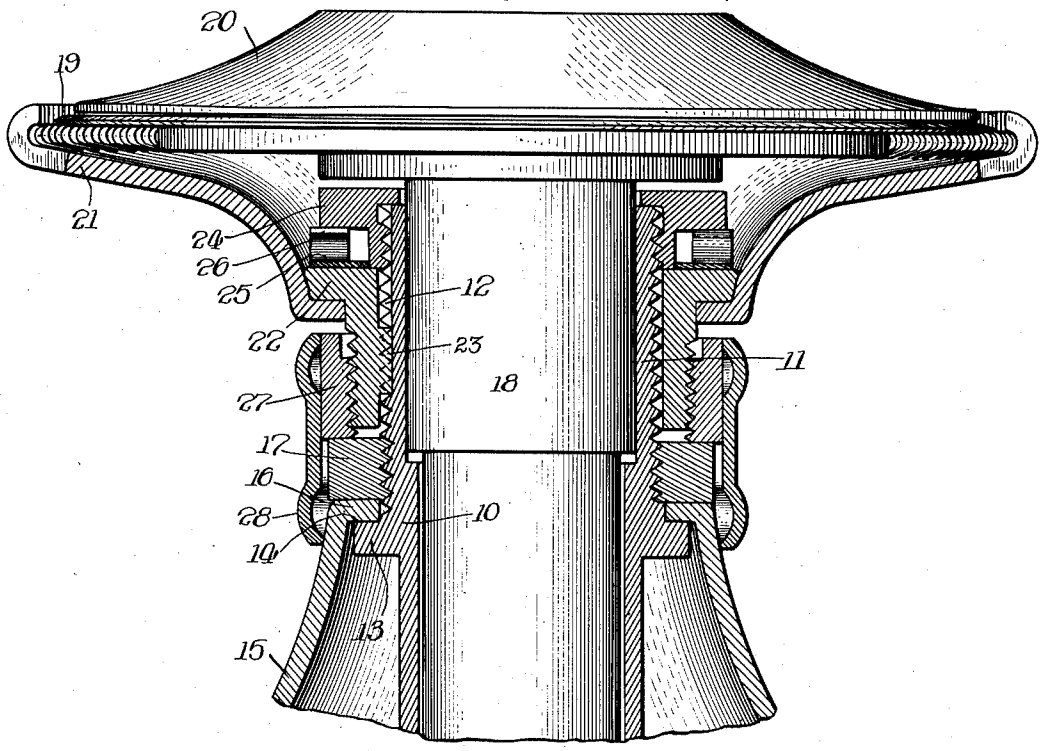
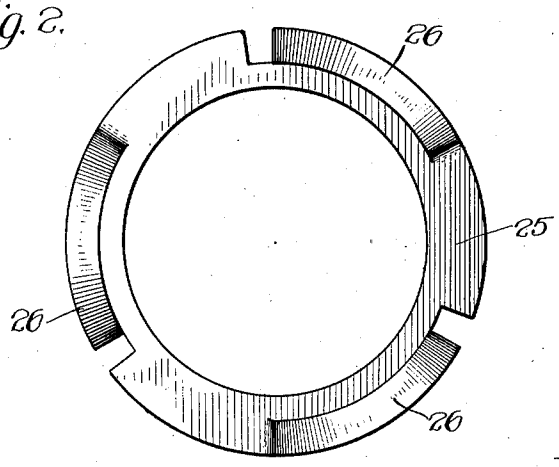


Fig. 2.



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ADJUSTABLE RAZOR-BLADE GUARD.

1,334,534. Specification of Letters Patent. Patented Mar. 23, 1920.

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To all whom it may concern:

Be it known that I, HUGO S. HASSELQUIST, a citizen of tne United States, residing at Oak Park, in the county of Cook and State of Illinois, have invented certain new and useful Improvements in Adjustable Razor-Blade Guards, of which the following is a specification.

My present invention relates to guards or shields for razor-blades and concerns more particularly, but not exclusively, adjustable mountings for the guards of rotary razor-blades. The leading purpose of the invention is the provision of an appliance of this type of simple structure unlikely to become deranged or damaged in service and which permits adjustment of the guard or shield without touching the latter, hence avoiding the danger of cutting the fingers on the adjacent sharp edge of the blade. To the accomplishment of this end, special means are provided for obtaining such adjustment, whereby danger of unintentional variation or change of the adjustment is obviated.

In order to illustrate how the accomplishment of this main object and various other purposes is obtained in a simple embodiment of the invention, I have illustrated in the accompanying drawing forming a part of this specification, a preferred incorporation of the invention in physical form, and in the two views thereof the same reference characters refer to corresponding parts.

In this drawing:

Figure 1 is an enlarged fragmentary vertical section through the rotary razor and its adjustable guard, and

Fig. 2 is a plan view of the spring associated with such guard.

Referring to the drawing it will be perceived that the appliance includes a stationary, hollow, cylindrical-post 10, externally screw-threaded at 11, provided with a lengthwise groove or key-way 12, and equipped with an outstanding circular rib 13, affording a shoulder 14. The handle for the razor comprises in part a sheet-metal shell or casing element 15 having an inturned flange or circular lip 16 adapted to bear against the shoulder 14 on which it is pressed and firmly held by a retaining-nut 17 screwed on the threaded post.

Internally such hollow post accommodates a hollow rotary drive-shaft 18 revolved by a mechanical-motor (not shown) contained or housed in the handle of which the element 15 forms a part. At its top or outer end shaft 18 carries and rotates a circular disk sharp-edged blade 19 above which is a face-plate 20 supported on an inner stationary or fixed post (not illustrated).

A round, toothed or notched blade-guard 21 of the shape in cross-section clearly shown is soldered or otherwise firmly fixed to a flanged ring support 22 mounted and slidable longitudinally on the post 10 over its screw-thread, turning of such support and its blade-guard being prevented by a projection or key 23 thereon fitted and slidable in the keyway or groove of the post.

A threaded retaining collar 24 is screwed on the end of the post and positioned between it and the guard-support I employ a leaf-spring disk 25 having pressed upwardly out of its plane a plurality, in the present instance three, of curved resilient leaves or strips 26. By this spring construction the blade-guard and its supporting ring are yieldingly pressed downwardly or away from the circular disk razor-blade.

A portion of the element 22 is externally screw-threaded and on such part is an internally-threaded adjustment sleeve 27 bearing at one end on the face of the adjacent clamp nut 17. This sleeve has fixed to it a suitably-shaped knurled or roughened cover member 28 desirably of a width to shield and cover the elements 27 and 17 and a portion of member 15, all as is clearly shown in the drawing.

It will be perceived, therefore, that the support for the razor-guard is retained between the spring element 25 and the sleeve 27. Owing to the clearance spaces between the parts 17 and 22 and 27 and 21 turning of the sleeve 27 by its cover element 28 may be employed to effect the desired adjustment of the guard toward and from the associated razor-blade, the support for the guard at all times being pressed down or inwardly by the spring 25 so far as is permitted by the engagement of the adjustment sleeve 27 with the clamping nut 17.

Obviously, by the employment of a construction of this character, there is no danger of unintentionally deranging or modifying the adjustment of the guard by the turning of the latter as it is held against ro-

tation. Inasmuch, also, as the position of the blade-guard is determined and secured by the adjustment of an element provided solely and especially for that purpose, involuntary or accidental modification of its position is practically impossible. It should be noted, furthermore, that the adjustment of the guard may be effected in either direction without touching it, hence eliminating any possibility of cutting of the fingers by the closely-adjacent razor-blade, the extent or amount of adjustment or position of the guard being easily seen at all times, including those during which the adjustment is being brought about.

It is to be understood that the particular embodiment of the invention illustrated and described is merely set forth by way of example only of one practical appliance incorporating the features of construction and operation of the invention. It will be understood, however, that the invention is susceptible of various embodiments differing more or less in mechanical details and hence, the invention is not limited and restricted to the precise and exact mechanical elements and features of structure presented.

I claim:

1. In a razor-guard construction of the character described, the combination of a support, a round razor-guard slidably but non-rotatably mounted on said support, and threaded means to adjust the position of the guard on said support, substantially as described.

2. In a razor-guard construction of the character described, the combination of a support, a razor-guard slidable on said support, a spring acting on said guard pressing it in one direction, and means to adjustably move the guard in the opposite direction against the action of the spring, substantially as described.

3. In a razor-guard construction of the character described, the combination of a support, a round razor-guard slidably but non-rotatably mounted on said support, a spring acting on said guard pressing it in one direction, and a threaded means adapted to adjustably move said guard in the opposite direction against the action of said spring, substantially as described.

4. In a razor-guard construction of the character described, the combination of a support, a round razor-guard slidably but non-rotatably mounted on said support, a spring acting on said guard pressing it in one direction, an adjustment sleeve having threaded engagement with said guard adapted to adjustably move said guard in the opposite direction against the action of the spring, and an abutment against which said sleeve bears, substantially as described.

5. In a razor-guard construction of the character described, the combination of a shouldered, threaded post with a longitudinal keyway, a handle-casing having an inturned lip overlying the shoulder of said post, a threaded clamping-nut on said post holding said lip against said shoulder, a flanged razor-guard, a threaded support for said guard having a key in said keyway and slidable on said post over its thread, a spring bearing against said support tending to slide it lengthwise of said post, a collar on said post against which said spring bears, and a sleeve threaded on said support and bearing on said nut and adapted to be turned to vary the longitudinal adjustment of said guard, substantially as described.

6. In a razor-guard construction of the character described, the combination of a shouldered threaded post with a longitudinal keyway, a handle-casing having an inturned lip overlying the shoulder of said post, a threaded clamping-nut on said post holding said lip against said shoulder, a flanged razor-guard, an externally-threaded support for said guard having a key in said keyway and slidable on the post over its thread, a disk-spring having a plurality of strips bearing against said support tending to slide it lengthwise of said post, a collar on said post against which said spring bears, and an internally-threaded sleeve coöperating with the thread of said support and bearing on said nut and adapted to be turned to vary the longitudinal adjustment of said guard, substantially as described.

HUGO S. HASSELQUIST.