April 4, 1950 H. DAZE 2,502,831

CIGARETTE HOLDER

Filed April 26, 1946

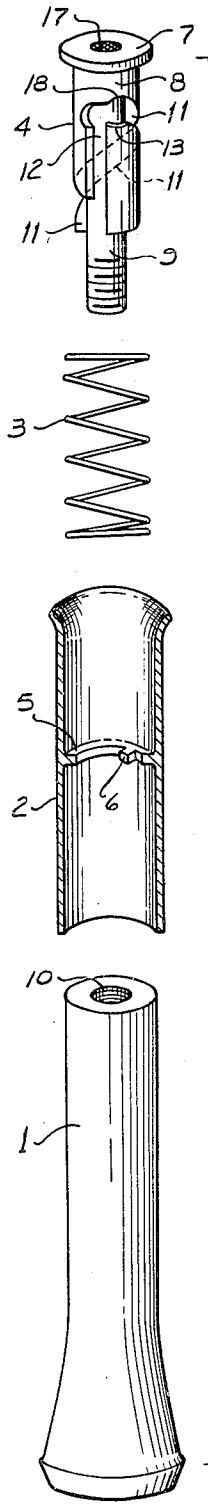
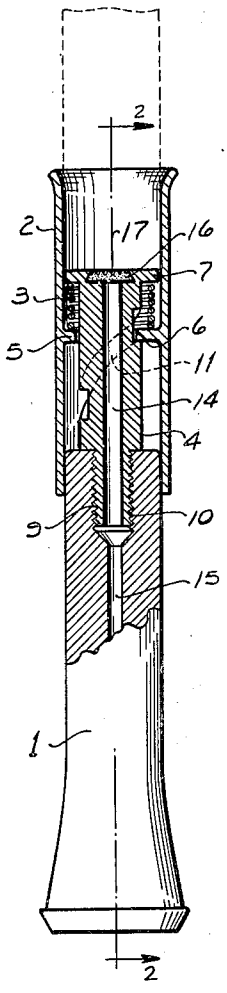


Fig 3

Fig 1



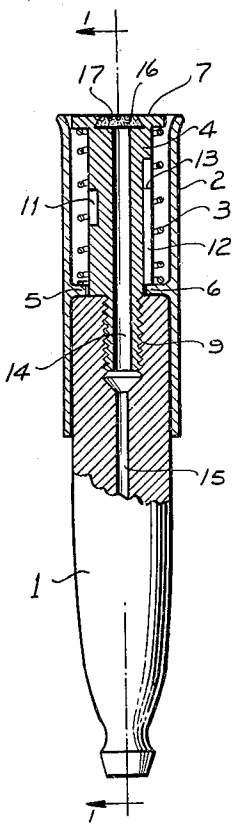


Fig 2

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Patented Apr. 4, 1950 2,502,831

UNITED STATES PATENT OFFICE

2,502,831

CIGARETTE HOLDER

Henry Daze, Mount Vernon, N. Y.

Application April 26, 1946, Serial No. 665,217

3 Claims. (Cl. 131—182)

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This invention is a cigarette holder of the type wherein the butt may be automatically ejected at the will of the operator.

Holders with automatic ejection have been heretofore proposed and several have made their appearance on the market. They have not, however, been satisfactory for many reasons. Most of them have been altogether too complicated. They are high priced and, in the main, their interior structures are such that the accumulation of gums, tar, and other extraneous matter within the working parts of the holder, cause them to become sluggish in their operation or completely fail to operate. It is difficult to take them apart and clean them and the great majority of persons who use devices of this kind have not the skill to do so. As a result, holders of this type have not found favor with the trade.

The object of the present invention is to provide a simple and efficient automatic holder which will embody a minimum number of parts, adapted to be economically manufactured and assembled and so constituted that they will not clog or become inoperative.

These results are accomplished by mounting on the outer end of the bit of the holder a coaxial post which is rigid with the bit and which is embraced by a single holding tube, coaxial with and mounted for axial reciprocation with respect to both the bit and the post. The holding tube is provided intermediate its free ends with an interior flange embracing the post and provided at one point in its inner circumference with an inwardly projecting integral projection or tooth adapted to work in a groove formed in the post. A portion of this groove is substantially helical while another portion of the groove extends rectilinearly of the post and where these two portions of the groove come together there is a hollow seat on which the tooth may rest when the holding tube is in extended position.

The post is provided on its outer end with a flange and a spring is interposed between this flange of the post and the flange of the holding tube. When the tooth is engaged with the hollow seat the spring will be held under compression with the holding tube in extended position but, through slight relative rotation between the tube and the bit, the tooth may be released from the seat and the spring permitted to automatically retract the tube and eject a cigarette butt from the outer end thereof.

This structure is extremely simple and experience has shown that it will not get out of order over protracted periods.

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Features of the invention, other than those adverted to, will be apparent from the hereinafter detailed description and appended claims, when read in conjunction with the accompanying drawing.

The accompanying drawing illustrates one practical embodiment of the invention, but the construction therein shown is to be understood as illustrative, only, and not as defining the limits of the invention.

Figure 1 shows a holder embodying the present invention, partly in central section on the line 1—1 of Figure 2 and partly in elevation, with the holding tube in extended position to hold a cigarette which is illustrated in dotted lines in this figure.

Figure 2 shows the holder partly in central section on the line 2—2 of Figure 1 and partly in elevation, but showing the parts in cigarette ejecting positions.

Figure 3 shows the parts of the holder dismantled and separated, so that the individual elements of the structure may be clearly seen.

In the drawings 1 indicates the bit, 2 the holding tube, 3 the ejector spring, and 4 the post. The bit 1 may be of any appropriate shape and size to suit the taste of the user, but it is preferably circular at least for that portion of the length which is adapted to project into the tube 2. The tube 2 is cylindrical in form and is approximately twice the length of that portion of the cigarette adapted to be held therein.

The holding tube may be made in any appropriate way. However, I find it economical to manufacture the same in the following manner: A cylindrical piece of stock equal in length to the length of the tube is bored from both ends, leaving between the boring and counterboring a thin partition. The central portion of this partition is then stamped out to form a flange 5 having a projecting tooth 6, as clearly shown in Figure 3. The lower portion of the tube is bored to a size to fit over the contiguous end portion of the bit 1 while the upper end of the tube is bored with a diameter to receive a cigarette with a snug fit. The outer end of the tube is then flared by spinning or otherwise.

The post 4 is provided at its outer end with a flange 7 of an outer diameter slightly less than the inner diameter of the corresponding end of the tube 2. Below this flange the hub 8 of this post is of a size to pass through the inner circumference of the flange 5 of the tube and below the hub 8 the post has a reduced threaded shank 9, adapted to screw into the tapped hole 10 in the

bit. The hub is provided around the greater portion of its circumference with a helical groove 11 and for substantially the remainder of its circumference with a longitudinal groove 12. These grooves are of a width and depth to cooperate with the tooth 6 of the holding tube and where these grooves intersect at the upper portion of the hub, there is formed a slight declivity 13 which forms a seat.

The post has an axial bore 14 adapted to aline with the bore 15 of the bit to form a smoke passage. The outer end of this smoke passage may extend entirely to the outer end of the post 4, but I preferably provide it at this point with an undercut cavity 16 in which may be positioned fibrous filter material in the form of a pad. If desired this pad may be covered with a wire mesh screen 17. The filter and screen are removable and may be replaced by a clean filter when it becomes unduly soiled or permeated with extraneous material.

In assembling the parts of the holder, the bit 1 is first inserted into the lower end of the holding tube, the spring 3 is then dropped into the upper end of the holding tube, the post then forced downwardly through the spring and its threaded shank 9 screwed into the tapped hole 10 of the bit. This completes the assembly.

When it is desired to use the holder, the tube is held against rotation, while the bit 1, carrying with it the post 4, is turned in a clockwise direction, to cause the tooth 6 to ride upwardly or outwardly in the helical slot 11 to the top or outer end of said slot and into juxtaposition with the seat 13. The upper terminus of the helical groove is formed with a downward sweep 18, as best shown in Figure 3, so that the operator can readily feel when this point has been reached. During this turning operation, the spring 3 has been compressed into the condition shown in Figure 1, so that after the bit is released this spring will force the tube 2 downwardly to bring the tooth into engagement with the hollow seat 13, which will arrest movement of the parts and lock them in the position shown in Figure 1. Here the tube is shown as extending beyond the end of the post for a sufficient distance to permit the insertion of a cigarette into a tube where it is held and retained for smoking.

After the cigarette has been smoked and only the butt remains, the cigarette may be ejected by holding the tube, while the bit is rotated just enough to cause the seat 13 to be moved from under the tooth 6 to aline the tooth 6 with the longitudinal groove 12. When this has been accomplished, the spring will rapidly act to retract the holding tube into the position shown in Figure 2 and thus release the cigarette butt from engagement with the holding tube.

It will be apparent from the foregoing description that the post and bit are at all times rigid with one another and constitute in effect one moving part, while the only other moving part (aside from the actuating spring) is the holding tube 2.

I have hereinbefore described this invention as adapted to hold cigarettes. However, it may be adapted for holding cigars by merely shaping the outer end portion of the holding tube to receive and engage a cigar.

The foregoing detailed description sets forth the invention in its preferred practical form, but the invention is to be understood as fully commensurate with the appended claims.

Having thus fully described the invention, what I claim as new and desire to secure by Letters Patent is:

1. A cigarette holder comprising a bit, a post coaxial with and rigid with the bit, said post being provided at its outer end with a flange, there being formed in the post helical and longitudinal grooves with a concave seat between their outer ends, a holding tube embracing the post and the contiguous end of the bit and provided intermediate its ends with an internal flange, a tooth carried by and projecting into the interior of the tube and cooperating with the grooves of the post, and a compression spring interposed between the flange of the post and the flange of the holding tube.

2. A cigarette holder comprising a bit, a post coaxial with and rigid with the bit, said post being provided at its outer end with a flange, there being formed in the post helical and longitudinal grooves with a concave seat between their outer ends, a holding tube embracing the post and the contiguous end of the bit and provided intermediate its ends with an internal flange having an inwardly projecting tooth cooperating with the grooves of the post, and a compression spring interposed between the flange of the post and the flange of the holding tube.

3. A cigarette holder comprising: a bit, a post coaxial with and rigid with the bit, said post being provided with an external flange, there being formed in the post helical and longitudinal grooves with a concave seat between their outer ends, a holding tube embracing the post and provided with an internal flange having an inwardly projecting tooth cooperating with the grooves of the post, and a compression spring interposed between the flange of the post and the flange of the holding tube.

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