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1,530,348

J. A. BLOM

TOBACCO USER'S APPLIANCE

Filed Dec. 29, 1923

Fig. 1.

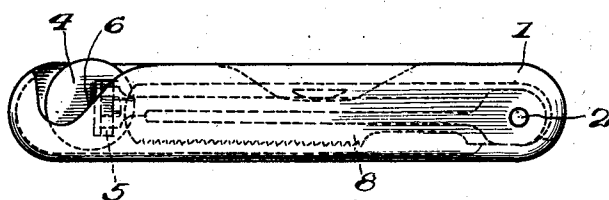


Fig. 2.

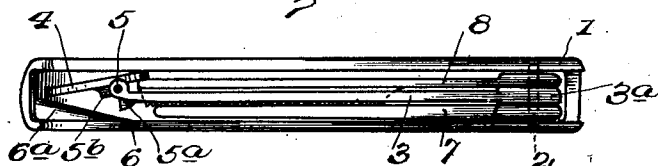


Fig. 4.

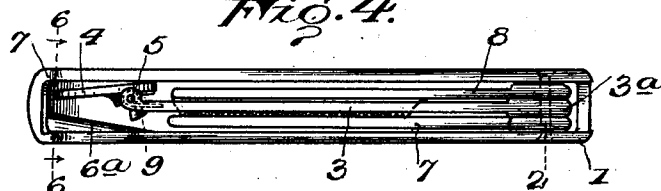


Fig. 5.



Fig. 3.

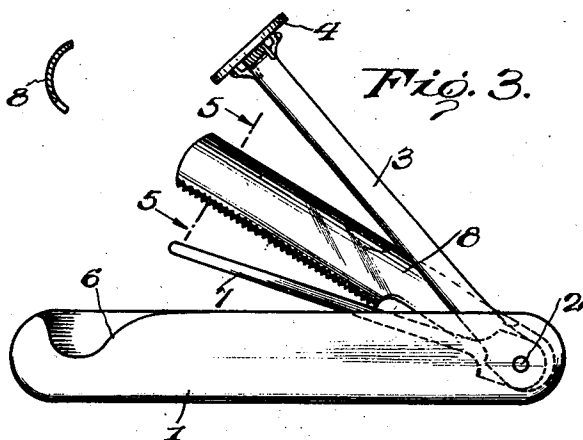
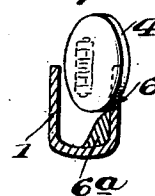


Fig. 6.



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TOBACCO-USER'S APPLIANCE.

Application filed December 29, 1923. Serial No. 683,450.

To all whom it may concern:

Be it known that I, JOHAN ALBERT BLOM, a citizen of Sweden, and a resident of Stockholm, Sweden, have invented certain new and useful Improvements in Tobacco-Users' Appliances, of which the following is a specification.

This invention relates in general to tobacco users' appliances, and more particularly to a smoker set including a folding tobacco stuffer.

The object of the invention is to provide a device of this character which when not in use may be folded up to present a compact article adapted to be conveniently carried in the pocket and which at the same time may be readily adjusted so as to be capable of effective use for its intended purposes.

A further object is to provide a device of this character and having the foregoing enumerated advantages and capacities and it also embodies a foldable tobacco stuffer which is automatically extended when positioned for use and automatically folded when moved to inoperative position.

Other objects and advantages of the invention reside in certain novel features of the construction, combination and arrangement of parts which will be hereinafter more fully described and particularly pointed out in the appended claims, reference being had to the accompanying drawings forming part of this specification, and in which:

Figure 1 is a view in side elevation, showing one embodiment of the invention;

Figure 2 is a plan view of the device shown in Figure 1;

Figure 3 is a view in side elevation, showing the parts extended to some extent;

Figure 4 is a plan view of a slightly modified form of the invention;

Figure 5 is a detail view on line 5—5 of Figure 3; and

Figure 6 is a view in section, on line 6—6 of Figure 4 and illustrating the automatic folding operation.

Referring to the drawings wherein for the sake of illustration is shown the preferred embodiments of the invention, it will be seen that in all embodiments there is included a casing 1 having a closed bottom, closed sides and one closed end, the other end and the top being open. The casing 1 corresponds to the ordinary pen knife cas-

ing. At one end of the casing a pivot pin 2 is provided, the pivot pin being mounted in the side walls of the casing. A stem 3 is pivotally mounted on the pivot 2 and may have an enlarged head 3^a at one end engageable with one of the spring sections of the bottom of the casing so that the stem is yieldably held in extended or folded position in the same manner as a blade of an ordinary pen knife. It is to be understood that one of the end walls of the casing is recessed or cut away to permit the stem 3 to be extended in alinement with the casing. In the drawings the end wall at the right in Figures 1, 2 and 3 is shown cut away.

A stuffer plate 4, which preferably takes the form of a disk, is provided and is foldably connected to the free end of the stem 3. In order to effect this foldable connection a hinge joint or hinge connection 5 is employed between the end of the stem 3 and the plate 4. This hinge connection 5 preferably embodies stop lugs 5^a and 5^b which are engageable to limit the movement of the plate 4 relative to the stem 3 in one direction. With the plate so mounted on the stem it may be folded up against the stem or it may be extended with respect thereto. In the extended position of the plate 4 its plane is preferably at right angles to the longitudinal axis of the stem 3. Yieldable means is provided for biasing the plate 4 to extended position and preferably this means comprises a spring 9 having a coil mounted on the hinge pin of the connection 5 and having an arm engaging the plate 4 and an arm engaging the stem 3. The spring is tensioned to move the plate 9 in a counterclockwise direction as viewed in Figures 2 and 4, and this movement of the plate is limited by engagement of the stop lugs 5^a and 5^b. The spring 9 affords an automatic means for moving the plate 4 to extended position when the stem 3 is swung out of the casing 1. Automatic means is also provided for folding the plate 4 up against the stem 3, as shown in Figures 2 and 4 when the stem 3 is swung into the casing 1, and this automatic means preferably comprises a guide 6 formed by recessing one of the side walls of the casing 1 and inclining one of the walls of the recess, as shown to advantage in Figure 1. A second guide is also provided by fitting and securing in the casing below the guide 6 a triangular guide

block 6^a, the triangular block presenting an exposed inclined face. It is also to be noted in connection with the automatic folding operation that the hinge connection 5 between the stem 3 and plate 4 is located on one side of the center of the plate 4 and adjacent the periphery thereof. This location of the hinge connection 5 offsets the plate toward the guides 6 and 6^a and since the plate 4 is circular a portion of its periphery will engage the guide 6 before any portion thereof touches the opposite side wall of the casing, as shown to advantage in Figure 6. Moreover the inclined guide surface 6 is adapted to act with mechanical advantage due to the relatively long lever arm between the engaged portion of the plate 4 and the hinge connection 5. With these points in mind it will be understood that as the stem 3 is swung into the casing 1, a portion of the periphery of the plate 4 will first engage the guide surface 6. With these parts engaged, the continued swinging movement of the stem 3 will result in a swinging of the plate 4 about its hinge connection 5 and against the tension of the spring 9. This action progresses until the plate 4 leaves the guide surface 6 and comes into engagement with the inclined guide surface of the block 6^a whereupon it is continued until the plate 4 is folded up against the stem 3, as shown in Figures 2 and 4. While the guide block 6^a is preferably employed it will be obvious to those skilled in the art that this block may be omitted and the guide 6 only employed, the parts being properly proportioned to this end. When the plate 4 is moved to folded position by the guides it is held in such position as long as the stem 3 is positioned within the casing 1 by virtue of the engagement of a portion of the plate 4 with the wall of the casing 1 opposite the guide 6.

In addition to the stuffer constituted by the stem 3 and plate 4 there may be provided a cleaning needle 7 and a scraper 8, which are also mounted on the pivot pin 2 and preferably arranged on the opposite sides of the stem 3. The scraper 8 is constructed of resilient metal transversely curved, as shown in Figure 5, and is formed with teeth along its lower edge.

The form of the invention shown in Figure 2 varies from the form shown in Figure 4 only in the relative length of the scraper 8 and stem 3 but in all other respects these forms of the invention are identically the same. In the form of the invention shown in Figure 4 the stem 3 is considerably longer than the scraper 8 so that in both folded and extended positions the plate 4 clears and is spaced from the scraper 8. In

the form of the invention shown in Figure 2 the parts 3 and 8 are relatively so proportioned that a portion of the periphery of the plate 4 engages behind the outer edge of the resilient scraper 8 in the folded position of the parts so as to releasably and yieldably hold these parts in folded position.

I claim:

1. In a device of the character described, a casing, a stem pivotally mounted on the casing and adapted to be positioned therein or extended therefrom, a plate, a hinged connection between the stem and a portion of the plate lying on one side of the center thereof, said hinged connection having stop lugs for limiting the movement of the plate to extended position, and a spring for biasing the plate to extended position, said casing having guides cooperable with the plate when the plate and stem are moved into the casing to effect automatic folding of the plate up against the stem.

2. In a device of the character described, a casing, a stem mounted on the casing and adapted to be positioned therein or extended therefrom, a plate foldably connected to one end of said stem, and a spring cooperable with the plate and with the stem for biasing the plate to extended position, said casing having guides cooperable with the plate when the plate and stem are moved into the casing to effect automatic folding of the plate up against the stem.

3. In a device of the character described, a casing, a stem mounted on the casing and adapted to be positioned therein or extended therefrom, and a plate foldably connected to one end of said stem, said casing having guides cooperable with the plate when the plate and stem are moved into the casing to effect automatic folding of the plate up against the stem.

4. In a device of the character described, a casing, a stem mounted on the casing and adapted to be positioned therein or extended therefrom, a plate foldably connected to one end of said stem, and yieldable means for biasing the plate to extended position, said casing having a portion cut away to provide a guide cooperable with the plate to automatically fold the same against the stem.

5. In a device of the character described, a casing, a stem mounted on the casing and adapted to be positioned therein or extended therefrom, and a plate foldably connected to one end of said stem, said casing having a portion cut away to provide a guide cooperable with the plate to automatically fold the same against the stem.

JOHAN ALBERT BLOM.