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BOBBY PIN EJECTOR

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5 Claims. (Cl. 206—56)

This invention relates to a bobby pin dispensing device, and its particular object is to provide a very small dispenser, of compact size, so that it may be readily carried in a woman's handbag and will enable the convenient dispensing of the pins.

A characteristic of the device is that the shanks of each pin are automatically spread and held in such position that the pin may be removed by the fingers with the shanks thus spread for immediate insertion into either the hair or a pin-receiving hair curling device.

The invention will be described with reference to the accompanying drawing in which—

Figure 1 is an enlarged view in sectional elevation showing an embodiment of the invention.

Figure 2 is a transverse sectional elevation on the line 2—2, Figure 1.

Figure 3 is a horizontal section on the line 3—3, Figure 1.

Figure 4 is a horizontal section on the line 4—4, Figure 1.

Figure 5 is a horizontal section on the line 5—5, Figure 1.

Figure 6 is a fragmentary front elevation showing the top area of the device near its ejection end.

Figure 7 is a view in elevation of an embodiment of the invention showing by dotted lines the cover in its raised position.

Figure 8 is a fragmentary horizontal section at the ejection end of the device showing a pin in position to be grasped by the fingers and removed.

Referring to the drawing, the embodiment therein shown comprises a casing 1 having hinged thereto a cover 2. The casing is relatively narrow and its cavity may, if desired, conform closely to the width of the pin to be ejected, although, in the present embodiment, the width of the casing is somewhat larger.

Secured to the casing at the rear end thereof is a guide shaft 3 which slidably receives a shelf 4. A coil spring 5 surrounds the shaft and engages the lower end of the shelf, tending to move it upwardly. The rounded and thus apertured end of each pin is adapted to be received upon shaft 5 as indicated in the drawing, particularly Figures 3 and 4. At the discharge end of the casing 1 the latter is provided with a vertically extending wedge bar 6. When the pins are inserted the wedge bar will be received within the shank end of the pin and between the shanks in the manner shown in Figures 3 and 5. At its upper end the wedge bar is curved outwardly and upwardly, a suitable aperture being formed in the casing for such purpose. The curved and

downwardly extending portion of the wedge bar is shown at 6x.

The upper marginal wall of casing 1 may be slightly flared in an outward direction at 1x to receive the lower margin of the cover shown more particularly in Figures 2 and 5.

In the present embodiment, the cover member carries spaced ears 2x which receive between them the narrowed upper extension of a hinge lug 7 carried by the casing at one end thereof. The cover is thus hinged to the casing. If desired, a spring latch may be provided for the cover such as the latch 8, Figure 6, the curved end of which is adapted to slip over and engage the outwardly flared upper margin 1x of the casing 1.

At opposite sides the cover is formed with the slots 9, these slots extending horizontally and receiving the lateral wings of a slide plate 10, a plan view of which is shown in Figure 5 and an elevation in Figure 1. The slide 10, at its end nearest the outlet opening a of the cover, is upwardly bent and apertured to receive one end of coil spring 11, the opposite end of the spring being attached at 12 to an innerface of the cover.

The end of the slide opposite this upward extension is downwardly curved or hooked, and the slide is adapted to be moved relatively to the cover and into and away from an opening formed therein as shown more particularly in Figure 1. The lower end of the slide hook is initially positioned at the rounded or looped end of the uppermost bobby pin of a stack B, and the said uppermost pin will lie with its shanks slightly separated by the outward extension 6x of the wedge bar 6. Any suitable stop device may be provided for restraining upward movement of the stack of bobby pins beyond that position just described.

With the parts in the position of Figure 1 the exposed wings of slide 10 may be engaged by the fingers and the slide moved to the right and thus toward the opening a. The hooked end of the slide will by engagement with the head of the pin move the latter through opening a and to the position of Figure 8, the shanks of the pin being spread. Thereupon the user of the device may seize the shanks and by a slight upward and outward movement of the pin the latter may be withdrawn. Upon withdrawal of the uppermost pin the spring moved shelf 4 will raise the stack of pins B for a succeeding operation. It is to be noted that the upper end of shaft 3 will lie immediately below the uppermost pin B preliminary to an ejecting movement of the slide.

The shaft 3 has substantial utility in the form of the device illustrated by the drawing, serving as a guide not only for the pins but for the shelf 4. However, the interior of the casing may be so formed to adequately guide both the shelf and the pins without necessitating use of the shaft 3. Also, any form of spring may be used to raise the shelf, a vertically extending coil spring being illustrated in the drawing because such form of spring can be conveniently carried and guided by the shaft 3.

It will be understood that various modifications may be made in the form and arrangement of the elements illustrated in the drawing without departing from the spirit of the invention. For example, and particularly when the shaft 3 is eliminated, a hinged uppermost cover may be eliminated and a cover provided at the side of the casing so that a fresh supply of pins may be inserted into the casing by a lateral movement thereof. If desired, the pins may be mutually adhered, in the same general manner as the wire staple strips used in stapling machines and the connection may be as desired, a light lacquer adhesive being suitable. The device will be found very useful not only because of its compactness and the simplicity of the pin ejection means but because the pins are ejected with their shanks spread and thus ready for use. Commercial bobby pins are so formed that the shanks are spring pressed into mutual engagement and the separation of the shanks prior to use is a disagreeable operation tending to cut and injure the finger nails of the operator and such difficulty is avoided by my device.

Having described my invention, what I claim and desire to secure by Letters Patent is as follows:

1. In a container and ejector for bobby pins, a casing adapted to hold a stack of pins, the casing having an ejection opening, spring means for moving the stack in such manner that an uppermost pin of the stack is moved in register with the ejection opening after each ejection operation, pin ejecting means, and a wedge carried by the casing and extending adjacent said ejection opening, said wedge having its front edge opposite said opening for spreading the shanks of each pin during its ejection.

2. In a compact container and ejector for bobby pins, a casing adapted to hold a stack of pins, the casing near its top and at one end having an ejection opening, means for moving the stack of pins in such manner that an uppermost pin of the stack is moved in register with the ejection opening after each ejection operation, a hooked slide ejector having a finger engageable area projected through a slot in the casing structure, and a wedge bar carried within the casing and adapted as a guide member for the pins in such manner as to lie intermediate the shanks of the pins in said stack, the upper

end of the wedge bar being curved outwardly and passing through the ejection opening, as and for the purpose described.

3. In a compact container and ejector for bobby pins, a relatively narrow flat-sided casing, a shaft in said casing for one end thereof, a wedge member in the casing near the opposite end thereof, a shelf movably carried by the shaft and a spring engaging the shelf, the shaft being adapted to receive the looped heads of a stack of bobby pins and the wedge bar being adapted to engage the pins intermediate their shanks at the shank ends thereof, a slide ejector having an area passed through an aperture in the casing and thereby adapted to be manipulated by the fingers of an operator, the ejector having a contact member for engaging the head of the uppermost pin of a stack of pins within the container, the wedge bar at its upper portion being outwardly curved and extending through an opening formed in the casing.

4. In a compact container and ejector for bobby pins, a relatively flat and narrow casing, including a hinged cover, and adapted to hold a stack of pins, the casing having an ejection opening formed in its cover section, a shelf within the casing, spring means for moving the shelf to thereby carry the stack of pins in such manner that an uppermost pin of the stack is moved in register with the ejection opening after each ejection operation, the cover section having opposed elongated apertures, an ejector slide disposed within said cover section of the casing and finger engaging areas extending through said elongated apertures, the slide being engaged by a spring and having one end thereof bent in hook formation to engage the uppermost pin of the stack, and a wedge bar carried by the casing and having an outwardly bent uppermost section passing through said ejection opening.

5. In a compact container and ejector for bobby pins, a relatively flat and narrow casing, including a hinged cover, and adapted to hold a stack of pins, the casing having an ejection opening formed in its cover section, a shelf within the casing, spring means for moving the shelf to thereby carry the stack of pins in such manner that an uppermost pin of the stack is moved in register with the ejection opening after each ejection operation, the cover section having an elongated aperture, an ejector slide disposed within said cover section of the casing and having a finger engaging area extending through said elongated aperture, the slide being engaged by a spring and having one end thereof bent in hook formation to engage the uppermost pin of the stack, and a wedge carried by the casing and adjacent said ejection opening and having its front edge opposite said opening for spreading the shanks of each pin during its ejection.

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