June 10, 1952 R. VOGEL 2,600,087

COMBINED CONTAINER AND SPREADING DEVICE FOR BOBBY PINS

Filed June 17, 1949

Fig. 1.

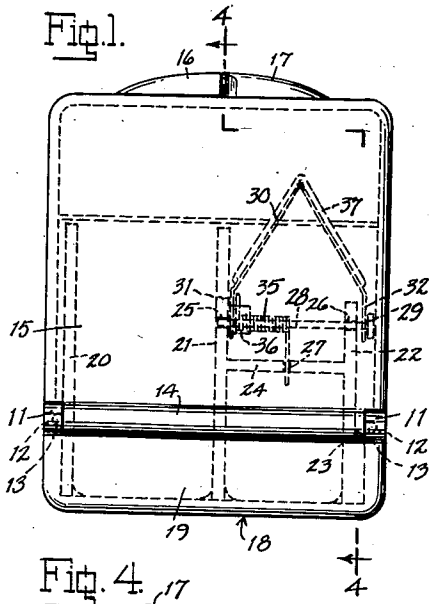


Fig. 2.

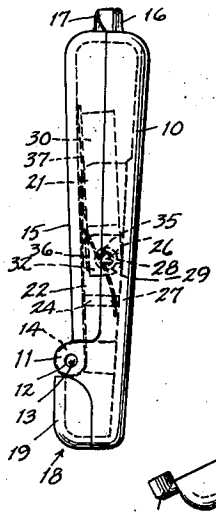


Fig. 5.

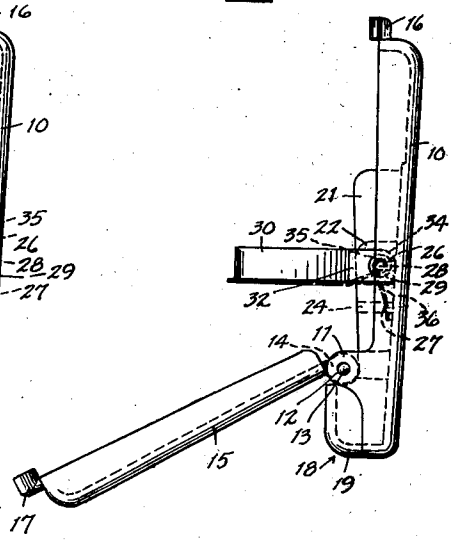


Fig. 4.

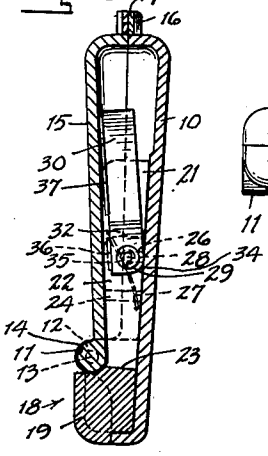


Fig. 3.

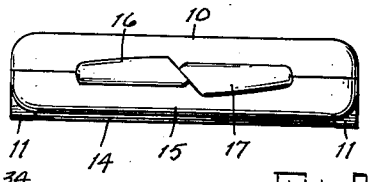


Fig. 6.

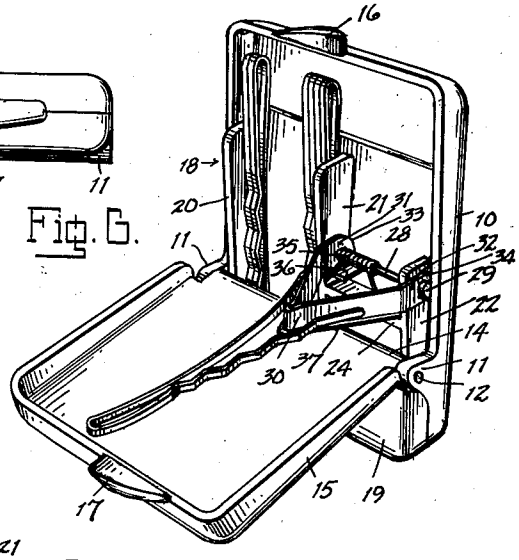


Fig. 7.

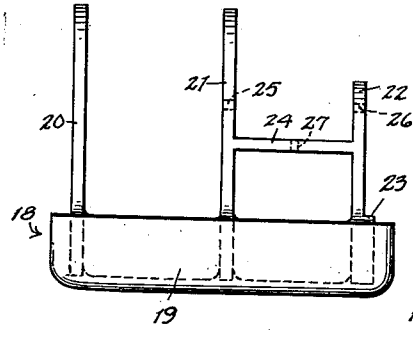


Fig. 8.

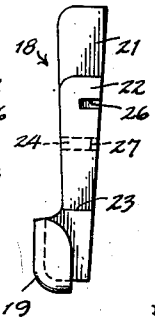
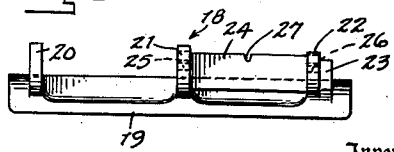


Fig. 9.



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COMBINED CONTAINER AND SPREADING DEVICE FOR BOBBY PINS

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2 Claims. (Cl. 132—1)

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The present invention relates to a combined container and spreading device for bobby pins, and has for an object to provide a device of this character of compact and attractive form so that it may be conveniently carried in the pocketbook of the user, and which is adapted to contain a quantity of bobby pins readily available for use when desired. A further object is to provide a container in which the bobby pins will be supported in position so that they may be conveniently extracted therefrom, and further to provide as a part of the container a spreading device with which the pins may be engaged to spread them preparatory to insertion in the hair.

A further object is to provide such spreading device which will automatically move into operative position upon opening the container, so that the user while holding the container in one hand may extract a pin therefrom with the other hand and, while still holding such pin, engage it with the spreader, the two legs of the pin when moved to open position being readily held in such position by the fingers so that the pin is ready for insertion in the hair. It is particularly proposed to provide a spreading device which in the closed position of the container will be folded therein and which upon opening the container will automatically move to an erected position ready for engagement by the pin. A further object is to provide a spreader of substantially V-shape having edge flange means for guiding the legs of the pin at each side as the pin is engaged therewith, thereby facilitating the spreading of the pin.

A further object is to provide a device of this character of relatively inexpensive construction in which the principal structural parts may be constructed of plastic moulded material, and to this end it is proposed to provide the body and cover parts of the container of similar form to the body and cover parts of a container ordinarily intended for book matches and substantially of the type as disclosed in the U. S. patent to Max Vogel, No. 1,985,751, dated December 25, 1934. In carrying out this adaptation, it is proposed to provide an insert member adapted to be interlockingly engaged within the body and cover parts of such container to provide therein a compartment for bobby pins as well as a supporting frame for a spreading device cooperatively arranged within the container.

With the above and other objects in view, an embodiment of the invention is shown in the accompanying drawings, and this embodiment will be hereinafter more fully described with reference thereto, and the invention will be finally pointed out in the claims.

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In the drawings:

Fig. 1 is a front elevation of the device showing the same in closed position.

Fig. 2 is a side elevation.

Fig. 3 is a top plan view.

Fig. 4 is a vertical sectional view, taken along the line 4—4 of Fig. 1.

Fig. 5 is a side elevation showing the device in open position.

Fig. 6 is a perspective view showing the device in open position, and also showing bobby pins contained therein and one bobby pin engaged with the spreading device.

Fig. 7 is a front elevation of the insert member.

Fig. 8 is a side elevation of the insert member.

Fig. 9 is a top plan view of the insert member.

Similar reference characters indicate corresponding parts throughout the several figures of the drawings.

Referring to the drawings, the combined container and spreading device for bobby pins, according to the illustrated exemplary embodiment of the invention, comprises a body part 10 of substantially rectangular form having side walls and top and bottom walls, and provided near its lower end with forwardly projecting ears 11 formed upon the two side walls in upwardly spaced relation to the bottom wall. The ears have axially aligned holes 12 therein, which are pivotally engaged by pins 13 formed upon the ends of a thickened rib structure 14 provided at the lower edge of the cover part 15, whereby the cover part is hinged to the body part for swinging movement about a hinge axis disposed transversely to its side walls.

The cover part 15 is also of rectangular form and is provided with an upper wall and side walls which are complementary to the upper and side walls of the body part 10, so that in the closed position of the cover the edges of the upper and side walls meet along the central vertical plane of the container. The pins 13 are integrally formed with the cover part and may be snapped into engagement with the holes 12 by slightly distorting the side walls of the container, this being made possible by the inherent resiliency of the plastic moulded material. Upon the upper walls of the body and cover parts there are respectively provided catch portions 16 and 17 adapted to snap into and out of engagement with each other by a twisting movement imparted thereto by the thumb and first finger, this action also being made possible through the in-

herent resiliency of the plastic moulded material.

An insert member, indicated generally as 18, is interlockingly engaged within the body and cover parts 10 and 15, and consists of a base portion 19 having front, bottom and end walls and adapted to fit against the lower portion of the body part beneath the projecting ears 13 with its upper edge in parallel contacting relation to the rib portion 14 of the cover part, so that the lower portion of the body part, which is normally opened to provide a space for receiving the striking portion of a book of matches in the use of the container as a match case, is filled and closed by the portion 19 of the insert member. Vertical wall portions 20 and 21 are integrally formed with the base portion 19 and project upwardly therefrom in spaced parallel relation, the rear edges of these walls engaging the inner surface of the body member 10 and the forward edges extending beneath the lower rib portion 14 of the cover part and engaging the inner surface of the cover part in the closed position of the latter. The walls 20 and 21 provide between them a compartment for receiving the bobby pins, the base portion 19 forming a retaining pocket in which the lower ends of the pins are engaged to prevent the pins from falling out.

A third vertically disposed wall 22 is provided at the other end of the base portion 19 from the wall 20, and is inwardly offset from the end wall of the base portion 19 by a shoulder portion 23, so that in the inserted position of the insert member a space is provided between the wall 22 and the side wall of the body part 10, for a purpose to be presently more fully pointed out. A horizontal bracing wall 24 is connected between the walls 21 and 22 to provide an H-frame structure for supporting the bobby pin spreading device, as will presently more fully appear. The walls 21 and 22 are respectively provided with transversely aligned notches 25 and 26, for receiving the pivot pin of the spreading device, and the wall 24 is provided substantially centrally at the underside with a notch 27 for receiving one end of the tension spring of the spreading device.

The spreading device comprises a transversely disposed pivot pin 28 having a head 29 at one end, this pivot pin resting within the notches 25 and 26 of the walls 21 and 22 with the head 29 disposed in the space between the wall 22 and the side wall of the body part 10, so that when the insert member 18 is interlocked in place by attachment by the cover part 15 to the body part, the pivot pin is interlocked in place. A V-shaped spreader member 30 is provided at the ends of its respective divergent sides with parallel pivot ears 31 and 32 having apertures engaged by the pivot pin 28, the ear 31 being adjacent the inner side of the wall 21, and the ear 32 being engaged between the outer side of the wall 22 and the head 29 of the pivot pin. The spreader is thus hinged at its lower end within the body part for swinging movement about an axis parallel to and spaced upwardly from the hinge axis of the cover part, and spaced downwardly from the upper end of the body part a distance at least equal to the height of the spreader. The corners of the ears 31 and 32 which are adjacent the inner surface of the body part 18 in the folded or closed position as seen in Figs. 2 and 4, are curved concentric to the pivot pin 28, as at 33 and 34, to permit swinging of the spreader between the closed position and the erected or open position substantially perpendicular to the body part, as seen in Fig. 5, the spreader being limited and supported in this open position by engagement of the squared corners of the ears 31 and 32, acting as stop means, with the inner surface of the body part. A coil spring 35 is engaged about the pivot pin 28 and has one end engaged with a lug 36, bent inwardly at right angles from the ear 31, and its other end engaged beneath the bracing wall 24 within the notch 27. The spring exerts a constant opening force upon the spreader, so that as the cover part is opened the spreader automatically moves to its erected position. In this position its upper end is in the path of closing movement of the cover part so that closing of the cover part automatically moves the spreader to its folded or retracted position. The spring pressed spreader also moves the cover to open position when the latter is released. Along the lower edges of the side walls of the V-shaped portion of the spreader, as seen in the open position in Fig. 5, there is provided an outwardly projecting flange 37, which forms guide surfaces at each side to maintain the ends of the bobby pin in engagement with the spreader as they are pressed into engagement therewith. The flange 37 also stiffens the sides of the spreader, so that it can be formed of relatively thin metal and at the same time will resist bending under the pressure of spreading the bobby pins.

A plurality of bobby pins is adapted to be contained within the compartment defined by the wall portions 20 and 21, as shown in Fig. 6. Upon opening the container by releasing the cover part the spreader 30 automatically moves to erected position under the force of the spring 35, and is rigidly supported in this position against downward pressure upon the flange 37 by abutment of the squared corners of the ears 31 and 32 with the inner surface of the body part 10. While the container is held in one hand the bobby pins may be individually removed by the other hand and thereupon spread by engaging the legs of the bobby pin with the spreader 30, the ends of the legs being guided during the spreading movement by the flanges 37. The container may also be placed upon a flat surface during use of the spreader so that both hands are free. The mounting of the spreader intermediate the ends of the body part is such that the body part provides a firm supporting base for the erected spreader, preventing it from tilting over as the pins are pressed against the flange 37. One leg of the bobby pin is slightly flared and the other leg projects beyond it, so that the ends of the legs may be easily engaged with the point of the spreader. By holding the spread bobby pin with the thumb and first finger substantially intermediate its ends it may be retained in its spread position and inserted in the hair. Upon closing the cover the spreader is automatically pressed into its folded position.

I have illustrated and described a preferred and satisfactory embodiment of the invention, but it will be understood that changes may be made therein, within the spirit and scope thereof, as defined in the appended claims.

What is claimed is:

1. A bobby pin containing and spreading device, comprising a body part and a cover part, each having upper and lower ends and side edges, said cover part being hinged at its lower end contiguous to the lower end of the said body part for swinging movement between open and closed

positions about a hinge axis disposed transversely to the side edges of said body and cover parts, the upper ends of said body and cover parts adapted to meet in the closed position of the cover part, a spreader hinged at its lower end within said body part for swinging movement about an axis parallel to and spaced upwardly from said hinge axis of said cover part and spaced downwardly from the upper end of said body part a distance at least equal to the height of said spreader, stop means carried by said spreader and engageable with said body part adapted to limit the swinging movement of said spreader in the opening direction of said cover part to an erected position substantially perpendicular to said body part and to rigidly support said spreader against opening movement beyond said erected position, and spring means normally pressing said spreader into its erected position, the upper end of said spreader in its erected position being in the path of closing movement of said cover part whereby it is pushed into a retracted position between its hinge axis and the upper end of said body part through the closing movement

of said cover part, the opening of said cover part permitting the swinging of said spreader to its erected position under the force of said spring means.

2. The invention as defined in claim 1, further characterized in that said spreader comprises a pair of side walls converging to a point from the hinged lower end of said spreader, the edges of said side walls disposed toward the direction of opening movement of said spreader having outwardly projecting guide flanges for engagement by the legs of the bobby pin being spread.

RUDOLF VOGEL.

REFERENCES CITED

The following references are of record in the file of this patent:

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