This invention relates generally to mechanical type dispensing devices and more particularly to a novel dispensing structure particularly suitable for hair clips.

In beauty parlors as well as in the home, it is common practice for women to use hair clips in setting their hair. The type of clips most often used comprise hinged strips of metal having elongated portions adapted to be spread apart by applying thumb pressure on short portions on the other side of the hinges. Many such clips may be used in a single hair setting operation; for example, up to 25 or 30 and generally the clips themselves are simply kept in a box where they may be readily accessible during a hair setting operation.

In setting the hair, particularly in professional beauty parlors, it is desirable that the beautician be able to devote her full attention to the customer's hair at the time of setting the hair clips. However, with present arrangements, it is usually necessary for the beautician to remove her eyes from the customer's hair and look for a suitable clip in the box. Further, after picking up a clip, it is necessary for the beautician to orient the clip properly in her hand in order to spread and insert the clip. Thus, there is considerable wasted motion in the setting of the clips and also a considerable amount of time involved in constantly turning from the customer's head to the clip box to pick up a clip.

In addition to the foregoing, the clips, when scattered in a box, can become entangled with each other and generally do not present a neat appearance either in a beauty parlor or at home. Furthermore, they are subject to becoming lost.

With all of the foregoing considerations in mind, it is a primary object of this invention to provide an improved hair clip dispenser in which a large number of clips, up to 70 or 80, may be retained in single structure.

More particularly, it is an object to provide a hair clip dispenser particularly designed for thumb pressure operated type clips wherein a succession of clips are rendered available in response to successive clips being withdrawn, the positioning of the clips always being of the same orientation so that a consistent grasping of the clip will result in proper orientation of the clip in a beautician's hand for easy insertion in the patient's hair, all to the end that the beautician need not remove her eyes from the customer's head while setting the hair clip.

Still another important object is to provide a hair clip dispenser which is easy to load, is simple in mechanical design and thus reliable, and which provides a neat and compact storage means for the clips when not in use.

Briefly, these and many other objects and advantages of this invention are attained by providing a dispenser in the form of a frame means defining a circular magazine having an opening at one peripheral portion. The circular magazine itself has a given radius and width sufficient to accommodate a plurality of clips, the clips extending generally in radial directions from a central hub within the magazine. A suitable biasing means urges successive clips disposed in the circular magazine towards the opening so that one clip will always be available after withdrawal of the previous clip with the advantageous result that successive clips are rendered successively available one at a time so that a hair setting operation may be very easily carried out without having to look at the magazine when withdrawing a clip.

A better understanding of the invention will be had by now referring to a preferred embodiment thereof as illustrated in the accompanying drawings, in which:

FIGURE 1 is a perspective view, partly cut away, of the front of the dispenser for hair clips in accordance with this invention; and,

FIGURE 2 is a rear view of the structure of FIGURE 1 looking in the direction of the arrow 2 and also partially cut away to show various features thereof.

Referring first to FIGURE 1, the dispenser includes a base 10 serving to mount a frame means 11 extending upwardsly from the base. The frame means 11 defines a circular magazine 12 of radius R and width W lying in a vertical plane within the frame.

As shown in the upper portion of FIGURE 1, the frame includes an upper opening 13 communicating with the interior upper peripheral portion of the magazine. This opening 13 cooperates with a stop means in the form of a bracket 14 extending across the width of the magazine adjacent to the upper opening to define an access area.

At the center portion of the magazine there is rotatably mounted a hub member 15 serving to support one end of an elongated pressure plate 16 as at 17. As shown, the pressure plate extends generally in a radial direction within the magazine and terminates at a free end 16' adjacent to the inside periphery of the circular magazine. The length of the pressure plate 16 is slightly less than the radius R and the width of the pressure plate is slightly less than the width W of the magazine. There is thus provided sufficient clearance so that the pressure plate 16 may swing about the interior of the magazine 12.

The structure is completed by a biasing means including a lever element 18, a portion of which is shown in FIGURE 1 engaging the under side of the pressure plate 16. This biasing means urges the pressure plate about the interior of the circular magazine in a direction towards the stop means 14.

With the foregoing arrangement, a plurality of hair clips, indicated generally at 19, may be successively inserted through the access opening 13 between the stop means 14 and the pressure plate 16, the pressure plate swinging about in a clockwise direction to accommodate additional clips as they are inserted. The various clips 19 thus all lie in general radial directions within the magazine. For a magazine of radius slightly longer than the clips involved, the structure can accommodate up to 70 to 80 hair clips about its interior.

In FIGURE 2, the rear of the magazine is shown looking in the direction of the arrow 2 of FIGURE 1 wherein there is shown a rear housing 20 incorporating the biasing means of which the small portion 18 described in FIGURE 1 constitutes a part. As shown in FIGURE 2, in the broken away area, the lever element 18 is secured to a lever shaft 21 in turn provided with a handle 22 extending from the rear housing 20. The shaft 21 is mounted for rotation coaxially with the hub 15, the lever element 18 laterally extending into the circular magazine to engage under the pressure plate 16 as described in conjunction with FIGURE 1. The handle 22 provides a manual means to enable rotation of the lever element and shaft about the mounting axis.

Incorporated within the housing 20 is a circular band type coil spring 23 having its inner end rigidly secured to the shaft 21 as at 24 and its outer end secured to the inside of the housing 20. The biasing is such that the shaft and lever element are urged in a clockwise direction within the housing 20 as viewed in FIGURE 2 so that the laterally extending portion of the lever element 18 will urge the pressure plate 16 towards the stop member 14.
In the operation of the dispenser, the handle 22 of the biasing element is manually rotated in a counterclockwise direction as viewed in FIGURE 2 to permit the pressure plate to swing free of the stop means 14. Hair clips 19 may then successively be dropped into the access opening 13 to lie against the pressure plate and as more clips are added, the pressure plate is manually permitted to swing away from the stop by means of the handle 22 to accommodate the various clips. The entire magazine may be filled substantially about its complete interior.

After the magazine is filled, the last clip to be inserted will be in engagement with the stop means 14 and its upper end will thus be available at the access opening 13. When a beautician is setting hair, she may very easily grasp the clip, such as the specific clip 19' illustrated in FIGURE 1. As the beautician withdraws the clip 19', the pressure of the next adjacent clip resulting from the biasing of the pressure plate will, through frictional engagement, serve to partially withdraw the next adjacent clip through the access opening 13 so that it will then assume the position of the clip 19' after this latter clip has been removed.

Each time a clip is removed from the magazine the pressure plate will cause the clips to index about a short circumferential distance corresponding to the thickness of the clip so that a clip will always be available for easy withdrawal from the access opening 13.

As a consequence of the base mounting 10 and the positioning of the access opening at the upper end of the frame 11, the dispenser may be positioned in a convenient location so that the beautician can readily withdraw one clip at a time without having to look at the clips themselves. This results in greatly increased efficiency in the setting of the clips in a customer's hair in that the beautician may keep her eye on the customer's head while setting the clips and simply reach to a consistent location and successively withdraw the clips as required.

In addition to the foregoing advantages, it will be clear that the dispensing device provides a handy container for the clips so that they may be easily stored in a neat and compact manner.

From the foregoing description, it will thus be evident that the present invention has provided a greatly improved hair clip dispenser. While a specific embodiment of the invention has been shown and described, various changes that fall within the scope and spirit of the invention will occur to those skilled in the art. The dispenser for hair clips is therefore not to be thought of as limited to the exact embodiment set forth merely for illustrative purposes.

What is claimed is:
A dispenser for hair clips comprising, in combination: a base; a frame means mounted on said base and defining a circular magazine disposed in a vertical plane and having a given radius and width, said magazine opening out at the upper portion of said frame; a stop member extending across the width of said magazine at said upper portion to define with a portion of said opening an access area; a hub member rotatably mounted in the center of said magazine; an elongated pressure plate secured at one end to said hub member and extending generally in a radial direction in said magazine for a distance slightly less than said given radius to terminate in a free end adjacent to the inside periphery of said magazine, said pressure plate having a width slightly less than said given width so that said pressure plate is swingable with said hub about the interior of said magazine; a rear housing secured to said frame means; and a biasing means urging said pressure plate towards said stop means, said biasing means including a lever element secured to a lever shaft rotatably mounted in said housing in coaxial relationship with said hub, one end of said element extending into said magazine to engage the underside of said pressure plate; a handle connected to said lever shaft at the rear exterior of said housing; and a coiled spring in said housing having one end connected to said lever shaft and its other end secured to said housing to bias said lever element in a direction to urge said pressure plate towards said stop means, said handle enabling rotation of said element in a direction to relieve the biasing force on said pressure plate and thereby facilitate loading of said magazine with hair clips, whereby a series of clips may be successively loaded into said magazine through said access area between said stop means and pressure plate, one clip always being urged against said stop means so as to be readily available for easy withdrawal.

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