UNITED STATES PATENT OFFICE

2,667,176

DISPENSING APPLICATOR FOR ARTIFICIAL EYELASHES AND THE LIKE

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Application March 24, 1952, Serial No. 278,141

8 Claims. (Cl. 132—1)

This invention relates to the art of facial make-up as customarily practiced by actresses and actors for stage purposes and as commonly resorted to by women for the purpose of beautifying their appearance.

It has heretofore been proposed to artificially elongate the eyelashes for make-up purposes by fastening to selected naturally-growing single lashes suitable lengths of hair or of a prepared thread. In U. S. Patent No. 1,831,801 granted November 17, 1931 to Marjorie A. Birk, there is disclosed a method of elongating eyelashes by using a water-soluble adhesive to fasten short lengths of hair to the ends of naturally-growing eyelashes, while in U. S. Patent No. 2,324,271 granted July 13, 1943 to Elizabeth Adler there is disclosed a unique artificial eyelash made up as a thread of cotton fibers or the like mixed with or coated by mascara to simulate a natural eyelash, as well as a method of fastening the same to a natural eyelash by the inherent adhesive quality of the mascara itself.

I have found either of the above practices to result in effective eyelash elongation for make-up purposes.

With the objective of rendering either of these effective make-up procedures readily available for general use, I have developed an applicator device whereby artificial eyelashes of both types may be easily and quickly applied by a user to her own eyelashes. A feature of my applicator is an arrangement of structure making it possible to successively sever and dispense individual eyelash lengths of hair or treated thread from a continuous supply of same, and to positively control such lengths during the stage of application, all manually, to the end that the procedure is rendered deft and sure for each and every user.

Further objects and features of my invention will become apparent from the following detailed description of a presently preferred specific form of the device conforming to the broader structural concepts here taught and claimed.

In the accompanying drawings, which illustrate the said preferred specific form of my invention:

Fig. 1 represents a side elevation of the applicator;

Fig. 2, a top plan;

Fig. 3, a front elevation;

Fig. 4, a fragmentary vertical section taken longitudinally along the line 4—4 of Fig. 2, and showing the device actually in use;

Fig. 5, a transverse section taken along the line 5—6 of Fig. 4; and

Fig. 6, a fragmentary horizontal section taken along the line 6—6 of Fig. 1, and showing the lower half of the device largely in plan.

Referring now to the drawings:

In the particular form illustrated, the applicator comprises a casing 10 made up of two sections 10a and 10b fitted tightly together and removably secured in place, as by means of screws 11. The casing may be made of any suitable material, preferably a plastic molded to required form by customary techniques.

Regardless of the specific construction of any particular embodiment, it will possess certain fundamental structure for effectuating the purposes of the invention. There will be means for progressively supplying a thread or hair of indeterminate length to a knife blade or other severing means in length increments corresponding generally to the individual artificial eyelashes to be applied, and there will be holding means in advance of the severing means, so that the individual artificial eyelashes successively cut from the supply length will be effectively retained by the applicator during the manipulation incident to attachment thereof to respective natural eyelashes.

In accordance with these fundamental structural requirements of the invention, the sections 10a and 10b of the casing 10 are provided with internal cavities, which meet, when the two sections are fitted together, to form a reel chamber 12 and a more forwardly disposed feed chamber 13. Formed longitudinally along the upper surface of the lower casing section 10b, and extending forwardly from the feed chamber 13 to a discharge opening 14a at the forward end of the casing, is a feed conduit 14, which is preferably of attenuate formation, so as to receive and guide a thread or hair in free sliding relationship along its length.

In instances where a prepared thread is to be used as artificial eyelash material, a spool or reel 15, carrying a supply 16 of such thread, is journalled for free rotation in the reel chamber 12, as by means of oppositely extending stub shafts 15a fitting into corresponding receiving recesses formed in the casing 10.

For instances where a hair is to be used as the supply, a passage 17 is provided through the body of the casing section 10a, directed diagonally toward and into the rear of the feed chamber 13.

Rotatably mounted within the feed chamber 13, is a feed roller 18. As illustrated, it is secured on a drive shaft 19, which has one end projecting beyond the casing 10, at one side thereof. A knurled thumb-wheel 20 is attached to such pro-
jecting end of the drive shaft 19, enabling the user of the device to manually turn the roller 18. The circumferential surface of the roller is knurled or otherwise friction-surfaced, and the diameter thereof is such as to snugly engage the thread 16 or hair which is passed thereunder, it being noted that the smooth interior wall surface 21 of the casing serves as a reaction member against the grip of the roller, so that the thread is advanced forwardly through feed conduit 14 when the thumb-wheel 20 is turned counter-clockwise.

Disposed within the casing 10 at a location spaced backwardly from the forward tip thereof by a distance substantially equivalent to the length desired for the individual artificial eyelashes, is a resiliently mounted knife blade 22, of razor sharpness, the same being arranged for manual actuation, as by means of pressure from the finger of the user. As illustrated, the knife blade 22 is fitted into a slidable slot 23 formed within an upwardly and forwardly protruding portion 24 of the casing section 10a, and has its upper end projecting outwardly of the casing and formed as a finger-push 22a. A return spring 25 enunciates the upper shank portion of the knife blade in customary fashion for its intended purpose.

The slidable passage passes directly across the feed channel 14 so that a push on the projecting end 22a of the knife blade will cause the razor-sharp blade to cut through the thread 16 or a hair fed forwardly through the feed channel 14 by means of the feed roller 13.

I prefer to form the forwarding end of the applicator as a comb to aid in the separation of the natural lashes during the stage of application of the artificial lash lengths thereto, and, to this end, provide a comb formation 26 at the forward end of the casing section 10b. It will be noted that such comb formation 26 extends forwardly immediately in advance of the discharge opening 14c of the feed conduit.

While various means may be employed to hold the thread 16 as it emerges from the feed conduit 14, so that successively severed lengths thereof will be under the positive control of the user all times during the process of applying them to the natural eyelashes, I have found a manually actuated flap clamp to be very satisfactory, and have here illustrated such a clamp at 27. In this instance, the flap clamp 27 is freely pivoted in and between opposite ears 28, which rise preferably integrally from the upper surface of the casing portion 24, and is normally supported in a slightly raised position by means of return spring 29.

In the operation of the applicator, the user grasps the same in any fashion which he finds to be most convenient, and which will enable him to properly manipulate the thumb-wheel 20 for successively advancing the thread or hair through the feed conduit 14, to also press the finger-push 22a for successively cutting off the respective eye lash lengths from the thread or hair supply, and to also press down upon the flap clamp 27 during the stage of actually applying the severed lengths of thread or hair to respective natural eyelashes.

It will be noted that, following the satisfactory attachment of an artificial eye lash to a natural eyelash as contemplated in the use of the applicator, the user will release pressure on the clamp 27, and will withdraw the applicator, thereby leaving the artificial eyelash in its attached position.

Following the attachment in this manner of a suitable number of artificial eyelashes, the user may trim them to any satisfactory contour line, by the use of a sharp pair of scissors. In this way, it will not be necessary to exactly measure the length of each successive artificial lash, nor to be too exacting in the attaching procedure. In the illustrated instance I have shown the lower casing section 10b as having an attenuated, rearwardly extending portion 30, which may be grasped and held during use, to steady the applicator, and which may be used thereafter to pat and smooth the eyelashes and eyelash-treated thread or hair within the applicator by mounting an open container 31 of mascara or other suitable material, such as hair dye of appropriate consistency, within the path of travel of the thread or hair, so that such thread or hair will pass through it in its travel. A weak spring 32 may be used, as shown, to provide proper contact between the treatment material and the thread or hair.

When applying artificial lashes of hair or other material by the use of a water-soluble or other type adhesive not inherent in the artificial lash itself, the free end of each artificial lash may be dipped into a supply of such adhesive immediately prior to application and while being held under the flap clamp 27 or other holding means.

It should be realized that, in some instances, especially with the use of mascara-treated thread or hair, frictional adhesion of the cut lash length to the walls of the feed conduit between the severing means and the dispensing orifice will suffice to satisfactorily hold the artificial lash in position during application. Accordingly, the term "holding means," as here used, is intended to refer to such structure providing frictional holding of the lash, in instances where additional means, such as the flap clamp 27, is not required for the purpose.

While the applicator will find its greatest usefulness in connection with the preparation and attachment of artificial eyelashes, it may also be used to advantage to elongate the eyebrows if so desired. However used, the casing structure which mounts the mechanism described hereinbefore can be configured, as illustrated, to fit snugly within and be conveniently received by the palm of the hand of a user when the mechanism is arranged as described.

Whereas this invention is here illustrated and described with respect to a specific preferred form thereof, it should be understood that various changes may be made therein and various other constructions can be resorted to, on the basis of the teachings hereof, without departing from the scope of the invention as defined by the claims which here follow.

I claim:
1. An applicator for artificial eyelashes and the like, comprising a casing; feed mechanism for a continuous length supply of artificial eyelash material, said mechanism being disposed within said casing; means in said casing for supplying said length of eyelash material to the feed mechanism, said casing defining a path of longitudinal travel for said eyelash material to a discharge exteriorly of the casing; severing means disposed
ment of the label film to the article and until such device is over the receptacle 25 on its return to the support 11. At such time, the suction is discontinued and a blast of air delivered to the device 14 to remove the paper sheet A of the label that has been retained by the device 14. Following such blast of air, the air pressure in the chamber of the device 14 will be atmospheric until such device is moving toward the uppermost label on the support 11, whereupon suction will be provided in such device to enable it to pick up and carry such label in the manner above described.

The article carrying surface of the support 12 is provided with a plurality of perforations or air vents which communicate by means of passages 30 with an air line 31. The line 31 is connected with a source of suction through tube 33. Properly timed valve means 32 of any suitable type is provided to apply a condition of suction at the surface of the support 12 while an article is positioned thereon, and until after the label film C has been applied to such article. Thus, the article is maintained in position while the paper layer A is being stripped from the film C without any possibility of movement of such article which might tend to affect the proper disconnection of the film from the paper layer.

While I have hereinabove described and illustrated in the accompanying drawing a preferred embodiment of my invention, it will be obvious to those skilled in the art that various changes and modifications may be made therein without departing from the spirit of the invention or the scope of the appended claims. Thus, the layer F of the label may be omitted and the thermoplastic adhesive material instead of printing inks, as has been previously indicated. When paper of the type of paraffin paper or other non-porous sheeting is used for the layer A instead of the porous, absorbent material above described, a film of the wax or paraffin will remain on the outer surface of the film C constituting the label proper when it is applied to the article and such wax film will be found to be desirable for certain purposes such as protection of the label against "weathering" and to enhance its appearance.

I claim:

1. In a machine for applying decalcomanias to separate successive articles at an applying station, means spaced from said applying station for holding a stack of heat sensitive decalcomanias, vacuum means for picking up a decalcomania from said stack and carrying such decalcomania to said applying station, means for applying heat to such heat sensitive decalcomania while the latter is carried by said vacuum means to the applying station and for applying positive pressure to the decalcomania during such application of the transfer thereof to the article, a discharge station, means for stripping the backing sheet of the decalcomania from the transfer thereof adhered to the article and carrying said backing sheet to said discharge station, and means for applying positive pressure to release the backing sheet at said discharge station.

2. In a machine for applying decalcomanias to separate successive articles at an applying station, means spaced from said applying station for holding a stack of heat sensitive decalcomanias, vacuum means for picking up a decalcomania from said stack and carrying such decalcomania to said applying station, means for applying heat to such heat sensitive decalcomania while the latter is carried by said vacuum means to the applying station and for applying positive pressure to the decalcomania during such application of the transfer thereof to the article, a discharge station, means for stripping the backing sheet of the decalcomania from the transfer thereof adhered to the article and carrying said backing sheet to said discharge station, and means for applying positive pressure to release the backing sheet at said discharge station.

3. In a machine for applying decalcomanias to separate successive articles at an applying station, means spaced from said applying station for holding a stack of heat sensitive decalcomanias, vacuum means for picking up a decalcomania from said stack and for carrying such decalcomania to said applying station, means for applying heat to the decalcomania during such application of the transfer thereof and means for applying positive pressure to the decalcomania during such application of the transfer thereof and for separating the backing sheet of the decalcomania from the transfer thereof adhered to the article while said heat sensitive decalcomania is still in a heated condition.

4. In a machine for applying decalcomanias to separate successive articles at an applying station, means spaced from said applying station for holding a stack of heat sensitive decalcomanias, vacuum means for picking up a decalcomania from said stack and carrying such decalcomania to said applying station, means for applying heat to the decalcomania during such application of the transfer thereof and means for applying positive pressure to the decalcomania during such application of the transfer thereof and for separating the backing sheet of the decalcomania from the transfer thereof adhered to the article while said heat sensitive decalcomania is still in a heated condition.

5. In a machine for applying decalcomanias to separate successive articles at an applying station, means spaced from said applying station for holding a stack of heat sensitive decalcomanias, vacuum means for picking up a decalcomania from said stack and carrying such decalcomania to said applying station, means for applying heat to the decalcomania during such application of the transfer thereof and means for applying positive pressure to the decalcomania during such application of the transfer thereof and for separating the backing sheet of the decalcomania from the transfer thereof adhered to the article while said heat sensitive decalcomania is still in a heated condition.

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