July 12, 1949. H. SPEARS 2,475,645

MANICURE BRUSH

Filed Nov. 23, 1945

Fig. 1

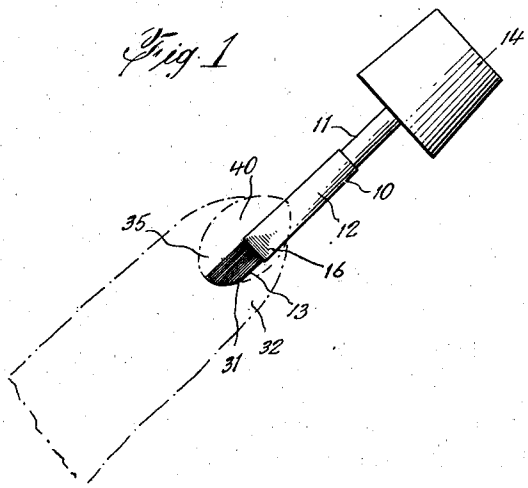


Fig. 5

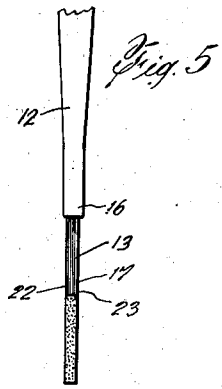


Fig. 2

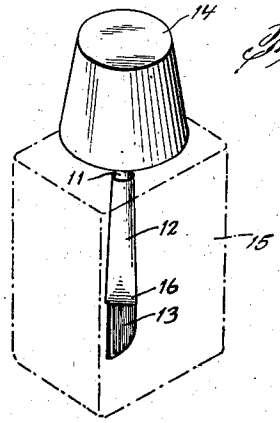


Fig. 4

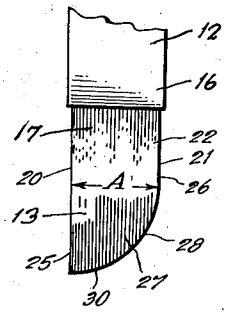
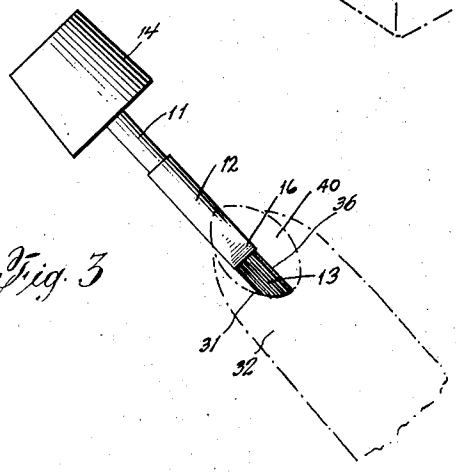


Fig. 3



INVENTOR
HARRY SPEARS

BY
Richard S. Temko
ATTORNEY

Patented July 12, 1949

2,475,645

UNITED STATES PATENT OFFICE

2,475,645

MANICURE BRUSH

Harry Spears, New York, N. Y.

Application November 23, 1945, Serial No. 630,493

1 Claim. (Cl. 15—167)

1

This invention relates generally to the field of cosmetics and more particularly to a brush for the application of fluid materials which are coated upon the user's nails. It has been considered highly desirable to place a transparent or pigmented coating upon the outer surface of the user's nails so that said coating completely covers the nail to protect and embellish it. On the other hand it has been considered highly undesirable to have the nail coating lying upon the surface of the user's skin bordering the nail. This is so because where the material is pigmented the esthetically desirable pattern or outline of the finger nail is given a rough and unsightly edge and while the effect is not so pronounced when the coating is transparent the otherwise neat appearance of the finger tips is spoiled. Furthermore, where the coating is allowed to remain on the user's skin adjacent the nail, this may be accompanied by an undesirable effect such as itching or irritation.

It has been proposed heretofore to use various masks and shields to confine the coating to predetermined areas, but these are open to many objections among which are first, that the configuration of various users' nails differ requiring additional shaping of the mask, secondly, that the masks are a bother and nuisance to place and remove, and thirdly, unless the mask adheres perfectly, a slight separation of the mask from the skin beneath it causes the coating to be attracted by capillarity into the particular area which it is desired to protect from the coating.

At the present time the most widely used method of applying coatings to the finger nails is that of the brush and particularly a brush which is integral with the cork or closure of the bottle containing the coating in liquid form. Such brushes are usually soft and pointed and the softness thereof is increased by the softening action of the solvent material of the coating, in which the brush rests during the periods between uses. The result of this is that when the coating is applied with such brush, the brush is very flabby and hard to control and the coating or lacquer is unevenly distributed with ragged edges and frequently gets upon the cuticle. In order to remedy this, the excess portion of lacquer is manually wiped away frequently leaving a smeared cuticle. While it is possible with the soft brush to produce a desirable result, considerable skill or professional application is required.

It is, therefore, among the objects of the present invention to provide a manicure brush or lacquer applicator, which by virtue of the shape and construction thereof, facilitates the application of the coating to the nail, enabling the user to produce a neat result and avoiding unwanted coating upon the cuticle about the nail.

2

Another object herein lies in the provision of a lacquer applicator or manicure brush with which the application of a coating with curved or straight line edges is readily obtained utilizing a lesser degree of skill.

Another object herein lies in the provision of structure of the class described which may maintain its efficiency for relatively long periods.

These objects and other incidental ends and advantages will more fully appear in the progress of this disclosure and be pointed out in the appended claim.

In the drawings in which similar reference characters designate corresponding parts throughout the several views:

Figure 1 is a front elevational view of a manicure brush showing a preferred embodiment of the invention.

Figure 2 is a view in perspective of the device shown in Figure 1 as incorporated with a container for liquid coating, which is indicated by dot dash lines.

Figure 3 is a rear elevational view of the device shown in Figure 1.

Figure 4 is an enlarged fragmentary elevational view corresponding generally to Figure 1.

Figure 5 is a fragmentary side elevational view as seen from the right side of Figure 4.

In accordance with the invention the manicure brush as a unit is generally indicated by reference character 10 and includes a handle element 11, a ferrule element 12, and an applicator element 13.

The handle element may be of any desired shape having sufficient size so that the same may be conveniently grasped by the fingers of the hand of the user which are not at that time being treated. As is well known the handle element may be integral with a cap 14 which is detachably engageable with the container 15 and maintains the unit 10 in predetermined position with respect to said container.

A ferrule element 12 is preferably in the form of a hollow tube which frictionally engages at the upper end thereof, the lower end of the handle 11. This is accomplished in a well known manner by compressing the upper end of the tube forming the ferrule 12 about the lower end of the handle element 11.

Disposed within the lower end 16 of the fer-

rule, and clamped thereby, are a plurality of bristles 17 which form the applicator element 13. As is well known in the brush art the bristles may extend up into the ferrule a distance sufficient to provide adequate anchorage therefore. In order to avoid confusion when the length of the particular bristles is referred to, the exposed length thereof is meant and the concealed or anchoring portion may be of any suitable length. The bristles are preferably stiff although having some resiliency and are preferably composed of filaments, fibres, or the like material or synthetic material which is not deleteriously effected at least to any substantial extent, by immersion in the coating or lacquer material with which the present device is used.

The bristles 17 are arranged generally in a row or rows so that the applicator element 13 is several times wider than it is thick. Thus I have found for example, that when the distance between the longitudinal edge 20 and the longitudinal edge 21 is five times greater than between the front surface 22 and the rear surface 23, an applicator element of desirable proportions is obtained.

The bristles 17 are of varying lengths. I have found that when the longest bristle 25 is twice the length of the distance between the edge 20 and the edge 21 that the brush is capable of holding sufficient material to produce satisfactory operation. The shortest bristle 26 is preferably one-half as long as the bristle 25. The intermediate bristles 27 are so graduated in length that their terminals 28 are arranged along an arc whose radius is substantially equal to the distance between the longest bristle 25 and the shortest bristle 21. This arc 30 enables the user to place the terminals close to the margin 31 of the cuticle 32 and by moving the device 10 in a curving direction a rounded edge to the coating is produced which may align with the adjacent edge 31 of the cuticle 32.

In the use of the brush where the same is moved in a generally counter-clockwise direction as viewed in Figure 1 to treat the right half of the nail 40, the coating 35 is best applied by placing the brush in the position shown in Figure 1 in which the long bristle 20 lies along the longitudinal axis of the nail 40. When it is desired to coat the opposite half of the nail 40, the left

half as seen in Figure 3, the brush is rotated through 180° about the longest bristle as an axis to take the position shown in Figure 3, where upon movement of the device in a generally clockwise direction will enable a smooth edge to be produced in the coating 36 which will abut against the margin 31 of the cuticle 32 without smearing.

It may thus be seen that I have provided a novel and useful manicure brush or lacquer applicator which is especially suited to the quick and accurate coating of finger nails. Obviously where desired the same device may have equal effectiveness when used on the toe nails.

I wish it to be understood that I do not desire to be limited to the exact details of construction shown and described for obvious modifications will occur to a person skilled in the art.

I claim:

A nail polish coating applicator, for applying coatings having curved edges, said applicator comprising: a plurality of bristles having inner and outer ends; means securing said bristles along a substantially flat row, the bristles being in substantial parallelism, the inner ends of the bristles being retained by said means; the outer ends of said bristles lying in an arc of a circle, the center of which lies on the longest bristle, the longest bristle being the starting point of said arcuately curved line, the shortest bristle having a length equal to that of the longest bristle minus the radius of said arc, the free ends of the bristles forming an arc of 90 degrees.

HARRY SPEARS.

REFERENCES CITED

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

UNITED STATES PATENTS

Number	Name	Date
58,417	Hickcox	Oct. 2, 1866
293,075	Pfeifer	Feb. 5, 1884
Re. 16,869	Goldman	Feb. 7, 1928
2,139,593	Kohler et al.	Dec. 6, 1938
D. 121,539	Foster	July 16, 1940

FOREIGN PATENTS

Number	Country	Date
599,500	Germany	July 3, 1934