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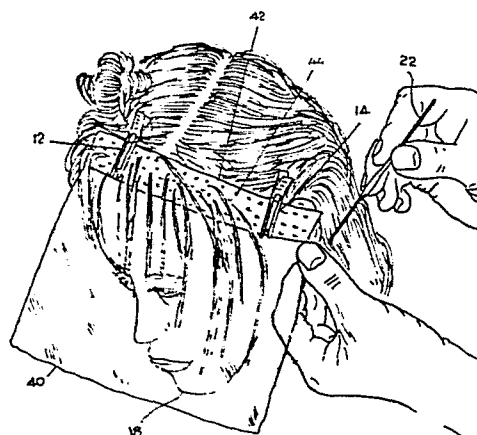
54 Hair treatment aid.

57 A hairdressing aid is described comprising a perforated strip (16) which forms part of or is secured or securable to a sheet, sleeve or bag (10) into which hair pulled through the apertures (20) can be wrapped after it has been treated with dye or like colouring material.

The perforated strip is adapted to be secured to the hair by using clips (12) over a region of the scalp in which part of the hair is to be dyed and after the hair has been pulled through the perforations and dyed the hair and sheet, sleeve or bag is rolled up and secured, possibly by the same clips (12), to retain the hair in the package whilst the dye is processing.

The strip may be formed by folding over thin sheet material and secured to form a two or more ply thickness. Alternatively, double-sided tape may be employed with the exposed surface of the tape which adjoins the tape to the edge of the sheet material.

Preferred material for both strip and sheet, sleeve or bag, is polythene.



Title: Hair treatment aidDESCRIPTIONField of invention

This invention concerns a hair treatment aid in which the selective dyeing of human hair can be more easily accomplished. The invention is a particular application in the so-called high-lighting a woman's hair.

Background to the invention

It is known to introduce highlights in a woman's hair by selectively dyeing regions of the hair a lighter colour than the remainder of the hair. In its simplest form a single colour dye is employed but it is now becoming more common to employ a number of different shades a lighter colour so as to enhance the overall effect and either produce a special highlight effect or a more natural looking head of hair.

It is important that the chemicals used do not come into contact with the scalp nor into contact with those parts of the head of hair which are not to be dyed. Hitherto the conventional solution has been to cover the head of the client with a latex rubber cap somewhat similar to a swimming cap which includes a large number of small perforations through which small clumps of hair can be pulled using a crochet needle or the like. Whilst the cap certainly ensures that no chemicals can reach the scalp under normal circumstances the cap has certain disadvantages amongst which are

1. It is unpleasant to wear for any further length of time;
2. The material is not sufficiently transparent to allow the hairdresser to see the hair before it is pulled through the perforations. Consequently it is possible for a region of dark growth to be completely missed during a subsequent

highlighting procedure and it is quite possible for the head of hair to look streaky and to contain unwanted dark regions after treatment simply because the hairdresser could not see the dark regions when selecting those regions of the hair to be highlighted;

3. Whilst it is possible to treat with the same colour dye all of the hair protruding through such a cap, it becomes a little more difficult to apply more than one colour since it is obviously important that the protruding hair coloured with one dye does not come into contact with the protruding hair to which another dye has been applied whilst the hair is still wet with the dye. To this end it is known to use small plastic bags or the like and to gather the ends of the hair protruding through the scalp cap which have been dyed with one particular colour and to place these ends in the bag and to secure the bag with a clip or peg whilst that hair is drying. However this does not overcome the basic disadvantages of the scalp cap enumerated above.

With these disadvantages in mind it is an object of the present invention to provide an improved aid by which a hairdresser can more easily selectively dye a head of hair and which is more comfortable in use for the client.

It is an object of the invention to provide such an aid which will also admit different colour dyes to be applied to different regions of the hair with little risk of the separately dyed regions coming into contact whilst the dyes are processing.

#### Summary of the invention

According to one aspect of the invention an aid for dyeing hair comprises a strip of perforated material through which hair can be drawn using a hooked needle in manner known per se and a sheet of flexible material which extends therefrom into which hair protruding through the perforations in the said strip can be wrapped after colouring material has been

applied thereto, so that the protruding hair can be kept separate from the remainder of the hair of the person to which the device has been fitted.

The sheet of flexible material is preferably thinner than the material forming the perforated strip.

Conveniently the strip is of relatively thick plastics material and the sheet material is of relatively thin plastics material.

In one embodiment the sheet of flexible material is preformed into a lightweight sleeve or bag into which the hair can be inserted before the sleeve or bag is rolled up to form a package.

The elongate strip may be formed integrally with the lightweight sheet, sleeve or bag.

The strip alternatively may be separate from the sheet, sleeve or bag and may be temporarily securable thereto so that in use the strip can be re-used whilst the sheets, sleeves or bags after use can be discarded.

The strip may be formed from one material and the sheet, sleeve or bag from another material and the two bonded together by way of adhesive or by a welding technique or by a mechanical link such as by rivets or eyelets or staples during manufacture.

The lightweight sheet, sleeve or bag is preferably formed from polythene.

The strip may be formed from latex rubber but more preferably is formed from a plastics material such as polythene and may, for example, be formed by a relatively thick strip of polythene or two or more layers of thinner

polythene formed by folding over a sheet of polythene in a concertina-like manner and securing the folded material to form a strip of multiple sheet thickness.

The strip may be formed by a layer of double-sided adhesive tape which itself is bonded to an edge region of a plastics sheet, or a sleeve or an opening in a flat plastics sheet material bag and the perforations formed through the sheet material and the double-sided adhesive strip. It is found in practice that the slight adhesion which inevitably occurs between the hair which has been pulled through the perforations and the exposed surface of the adhesive strip assists in holding the edge region forming the strip against the wearer's head.

Where a double-sided tape is used, the opposite sides of the tape may possess different adhesion characteristics so that a particularly strong bond is established between the tape and the material of the sheet, sleeve or bag whilst the exposed surface of the tape only admits a relatively weak adhesion bond with the same plastics material. When applied to a bag this allows the latter to be secured using the light adhesion bond until the bag is required for use when the bag can be opened by peeling back the free flap from the tape bonded to the other flap so as to expose the opening in the bag and to leave the perforated flap which constitutes the said strip ready to be applied to the head of hair of the client concerned

By employing a relatively inexpensive manufacturing technique such as this, the bags can be used on a throwaway principle.

This is in complete contrast to the present method in which a scalp cap is used the since latter is a relatively expensive device and cannot be used on a throwaway basis but has to be washed and sterilised for subsequent re-use. This invention thus allows a more hygienic procedure to be

adopted.

The present invention is also quite distinct from the prior art in that the perforated strip is only intended to accomodate hair from a small region of the scalp and a number of such strips and associated sheets, sleeves or bags are needed for a complete head of hair to be treated. Thus, for example, eight or ten or even twelve such strips and associated sheets, sleeves or bags are needed for a complete head of hair to be treated. The advantage is that only those regions of the head which are to be treated have to be covered with the strips and what is even more important is that the hairdresser can see the regions of the hair adjoining each strip as each is applied to the head and there is very much less possibility of the hairdresser missing a region of dark regrowth which often occurs when a complete scalp cap is used.

According therefore to a further aspect of the present invention, a hairdressing kit comprises a plurality of perforated strips and having attached thereto a flexible sheet, sleeve or bag all sealed in an airtight container such as another bag or box.

By arranging that the number of strips and associated sheets, sleeves or bags in each sealed container is sufficient for one client, a fresh container can be used for each client and the seal broken in front of the client to demonstrate the fact that completely fresh devices are being used on her hair.

As employed herein the expression device is intended to mean a perforated strip having attached thereto a flexible sheet, sleeve or bag.

This feature enables the manufacturer, if desired, to sterilise the devices or manufacture the bags under sterile

conditions and seal the devices whilst sterile onto their sealed container. In this way not only are fresh but also completely sterile devices available for use by the hairdresser.

Whilst the invention is not limited to an aid in which the perforated strip is permanently secured to a sheet, sleeve or bag, it is to be understood that the preferred form of the invention is one in which the devices are not intended for re-use and the perforated strip will, therefore, normally be integrally formed with, or at least normally secured, to the sheet sleeve or bag.

In order to secure each perforated strip over a selected region of the hair, two or more clips are required for clipping the strip to the hair. The clips may be in the form of hair grips or may have spring-closed jaws with protruding arms which can be gripped between the finger and thumb and squeezed together to open the jaws.

According to a further aspect of the invention, a hairdressing kit comprises a number of devices as aforesaid together with at least twice that number of clips, all contained in a sealed container.

Where the devices are sterilised before being put in the sealed container or are manufactured under sterile conditions, the clips are preferably correspondingly so manufactured or sterilised before being put into the sealed container.

Alternatively where it is not felt necessary to produce the clips under sterile conditions or sterilise these, the latter may be themselves sealed into a separate container which may be associated with a first container and may typically be contained therewithin.

The invention possesses the following advantages:-

- a) it allows easier access for the insertion of hair through the perforations;
- b) it makes the application of different colours to different regions of the hair easier since the strips can be placed exactly where required;
- c) each package associated with each strip contains hair dyed with only one colour so that differently dyed hair need not come into contact;
- d) the strips can be attached to the client's head of hair more easily and with less discomfort than an overall scalp cap;
- e) the devices (as defined herein) can be used on a throwaway basis, thereby improving hygiene;
- f) the hairdresser can see more easily those portions of the hair which are to be treated, thereby obviating the possibility of missing dark regions of regrowth.

According to another aspect of the invention a method of making a hairdressing aid comprises the steps of:-

1. forming a plurality of perforations in a length of narrow strips of relatively thick plastics material,
2. advancing the perforated strip into a heat sealing station together with a sheet of relatively thin plastics material with an overlap between the two, and bonding or welding the two materials together, and
3. cutting transversly to the overlap to form a plurality of sections each containing a length of perforated strip bonded to a sheet of relatively thin material.

If a sleeve is required a second sheet of flexible thin plastics material may be edge bonded to the first after cutting.

If a bag is required the sheet of flexible thin plastics material may be folded over and edge bonded to itself to form two edges of the bag, the third edge being formed by



the fold, and the opening in the bag is adjacent the perforated strip.

The invention will now be described by way of example with reference to the accompanying drawings:-

Figure 1 illustrates a bag and strip combination constructed in accordance with the invention in use on a client's head;

Figure 2 illustrates how the dye can be applied to the hair before it is inserted into the bag;

Figure 3 illustrates how a bag containing dyed hair can be folded so as to be secured as a neat package on the head whilst the hair therein dries,

Figure 4 is a perspective view of a bag constructed as one embodiment of the invention.

Figure 5 is a perspective view of an alternative embodiment in which the bag is replaced by a flexible sheet of plastics material.

#### In the drawings

Figure 1 shows a bag 10 constructed as one embodiment of the invention secured by two spring-clips 12 and 14 so that the strip 16 formed along one of the flaps of the opening of the bag overlies a region of the hair of the model whose head is shown in 18. The strip is perforated and one of the perforations is designated by reference numeral 20 and the hairdresser, using a hooked needle such as a crochet needle 22 can pull small quantities of the hair through the perforations such as 20 in the strip 16 by inserting the hooked end of the needle through the perforation and withdrawing the needle. The technique is well known.

After pulling through the requisite number of strands over the desired region to which a particular highlight colour is to be applied, the hairdresser is then in a position to gather the protruding strands in one hand and to apply a dye to the protruding strands. Figure 2 illustrates this

technique in which a bottle 24 containing the requisite dye is held in one hand and the protruding strands of hair are gathered together and held in the other hand. It will be seen that the hairdresser is shown here wearing protective gloves or mittens 26 and 28 which in their simplest form may be plastic bags similar to those to which the strips have been applied.

The dye would not normally be applied to the hair until all of the strips have been placed in position over the head and all of the hair which is to be dyed has been pulled through the appropriate strips. To this end a number of such bags and strips are shown located over the head and secured in position by means of the various clips.

After one region of the hair has been dyed by applying the dye as shown in Figure 2, the dyed strands of hair are inserted into the open bag and the latter is then folded as shown in Figure 3 first in half and then possibly at least once more to form a relatively small package which can be secured in its folded up condition by means of either additional clips or by temporarily opening the clips such as 12 and 14 which secure the strip associated with the bag in position and inserting the folded bag below the jaws of the clips concerned.

It will be seen that once this has been done, the dyed strands are totally contained within a neat package and cannot be affected by other dye subsequently applied to the hair and cannot come into contact with other strands of the hair which have already been dyed or are subsequently to be dyed perhaps another colour.

After the dye has taken the bags can be unravelled and after removing the clips such as 12 and 14, the bags can be removed from the hair and the hair washed or otherwise treated and then set as desired.

Figure 4 shows one form of the bag which is shown in use in Figure 1 to 3. The bag is formed from plastics sheet material such as polythene and includes a rear flap 30 and a front flap 32 which is folded over on itself at 34 to expose the opening into the bag. The opposite rear flap is provided with a thickened strip 36 and both strip and the flap of the bag if the latter protrudes behind the strip are perforated as at 38 with holes through which hair can be drawn using a hooked needle as previously described.

The strip 36 may be formed by folding over on itself the flap material 30 and bonding by means of welding, heat-sealing or adhesive or by mechanical fixing such as eyelets, rivets or staples (not shown).

Alternatively and preferably the strip 36 is formed by a length of double-sided adhesive tape secured to the flap 30 with sufficient length of the material forming the flap 30 but therebeyond which can be folded over and secured to the exposed adhesive surface of the tape.

In an alternative and further preferred embodiment the strip 36 is a length of double-sided adhesive tape one face of which bonds extremely well to the sheet material 30 and the exposed face of which will only lightly bond to the flap 34 of the other side of the bag. In this way the bag can be manufactured and left in a closed condition with the flap 34 covering the exposed adhesive surface of the strip 36 and when required the flap 34 can be peeled off the exposed adhesive surface to which it only lightly adheres and the strip applied to the hair after they have been pulled through the perforations such as 38.

The plastics material from which the bag is formed is preferably transparent so that the hair inserted in the bag can be seen. It is thus possible for the hairdresser to

check to see what colour has been applied to various regions of the hair which has already been treated.

As shown in Figure 5 the bag 10 may be replaced by a sheet of thin plastics material 40 having been sealed or welded thereto a perforated strip of thicker plastics material 42 having perforations 44 therein, through which hair can be pulled in the manner aforesaid. In all other respects the use of the alternative device Figure 5 is the same as that described in relation to Figures 1 to 4, except that in the case of the sheet (as opposed to a sleeve) it is only necessary to roll up the hair into the sheet material and secure it in place using clips or the like and it is not necessary to actually insert the hair into a bag or sleeve as is otherwise the case.

Patent Claims

1.A method of colouring human hair involving the steps of:  
(1) laying over the head of hair a strip of perforated plastics material having a thinner plastics sheet extending therefrom,  
(2) pulling strands of hair through the perforations in the said strip using a hooked needle in known manner,  
(3) applying to the protruding strands of hair colouring fluid, and  
(4) wrapping the hair in the thinner sheet of plastics material and temporarily securing the hair within the package for such time as is required to allow the colouring reaction to occur, the hair contained within the package thereby being kept separate from the remainder of the head of hair whilst the colouring reaction proceeds.

2.An aid for use in the method of claim 1 comprising a strip of perforated material adaptable to the contours of a human head through which hair can be drawn using a hooked needle (in a manner known per se) and a sheet of thinner non perforated flexible material which extends therefrom into which hair protruding through the perforations of the strip can be wrapped after colouring material has been applied thereto, so that the protruding hair can be kept separate from the remainder of the hair of the person to which the device has been fitted.

3.An aid as set forth in claim 2 in which the sheet of flexible material is thinner than the material forming the perforated strip.

4.An aid as set forth in claim 2 in which the sheet of

flexible material is formed into a bag into which the hair can be inserted before it is rolled up to form a package.

5. An aid as set forth in claim 4 in which the strip is formed integrally with the lightweight sheet sleeve or bag.

6. A hairdressing aid as set forth in claim 2 in combination with at least one other such aid when sealed in an airtight container, to form a hairdressing kit.

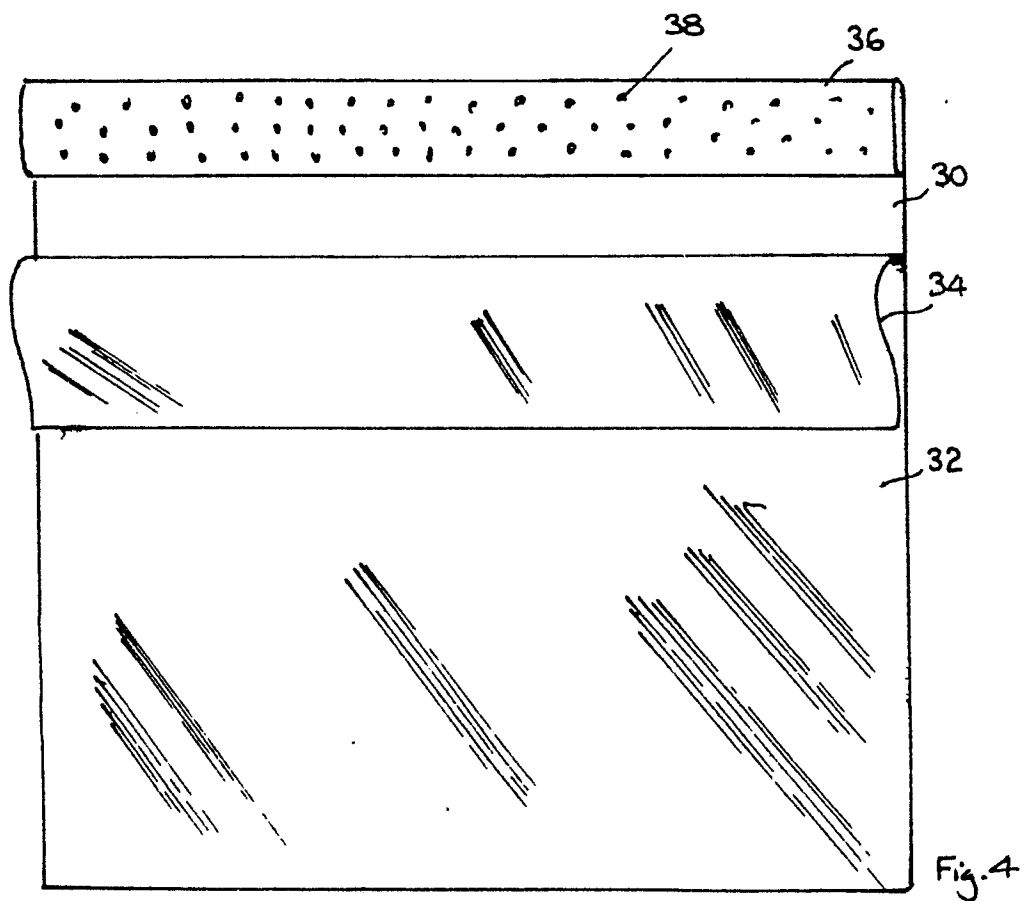
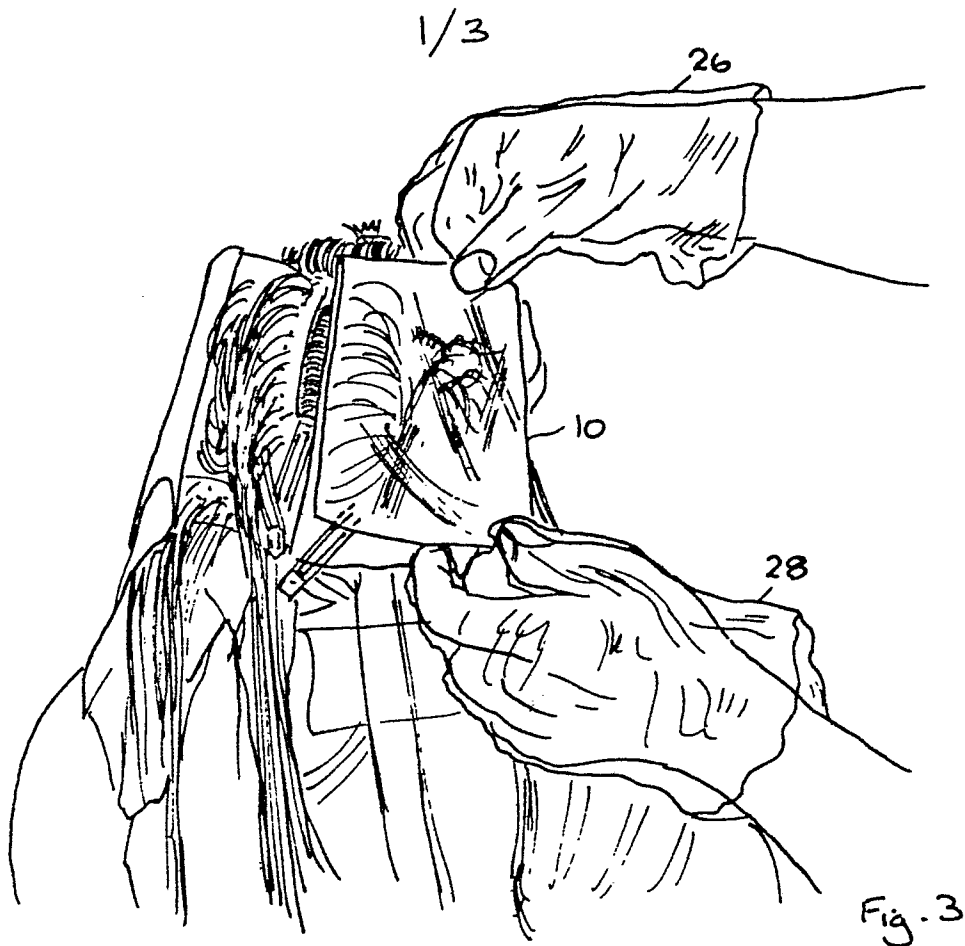
7. A kit as set forth in claim 6 further comprising clips by which a strip can be secured to the hair.

8. A method of making a hair dyeing aid as claimed in claim 2 comprising the steps of:

- (1) Forming a plurality of perforations in a length of strip of relatively thick plastics material,
- (2) feeding the perforated strip into a heat sealing station together with a sheet of relatively thin plastics material with an overlap between the two, and joining the two materials together, along the overlap, and
- (3) cutting transversely to the join to form a plurality of sections each containing a length of perforated strip bonded to a sheet of relatively thin material.

9. A method as set forth in claim 8 further comprising the intermediate step of folding the thin flexible plastics material sheet longitudinally so that the folded over edge extends parallel to and close to the perforated strip of relatively thick plastics material, before cutting transversely to the join to allow bags to be formed by welding the edges which extend perpendicularly to the

perforated strip.





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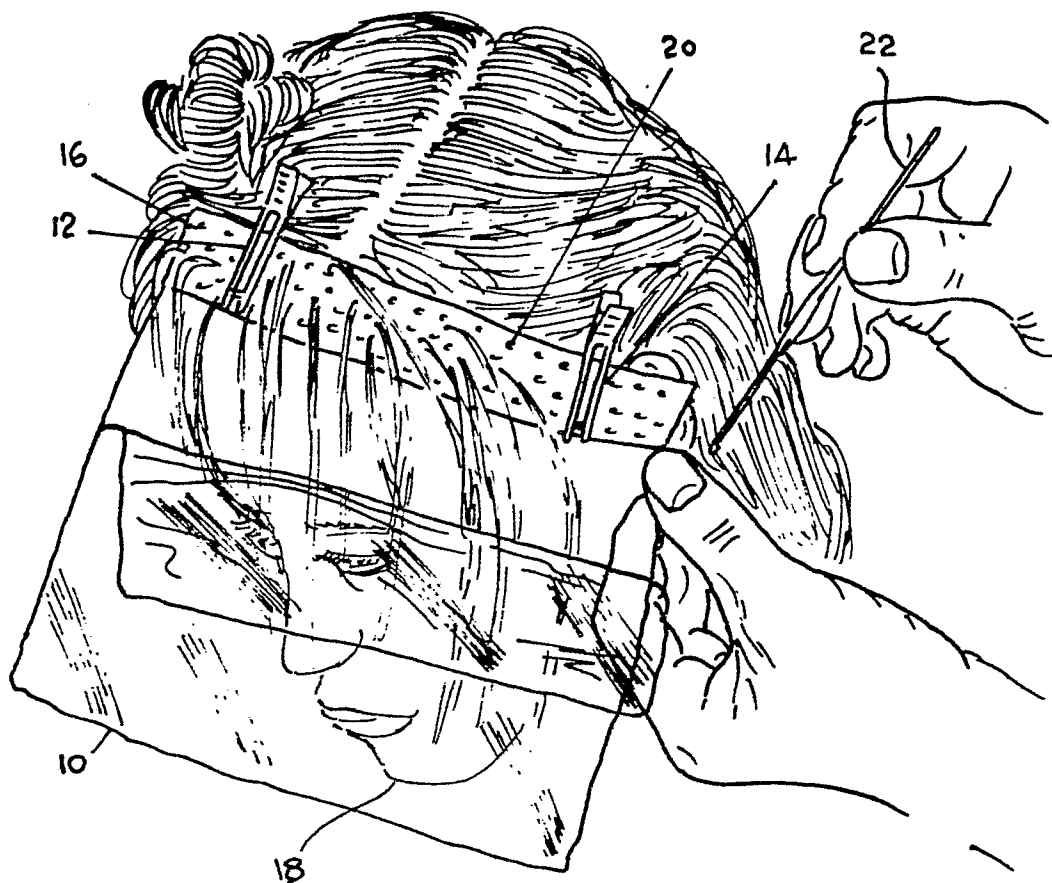


Fig. 1

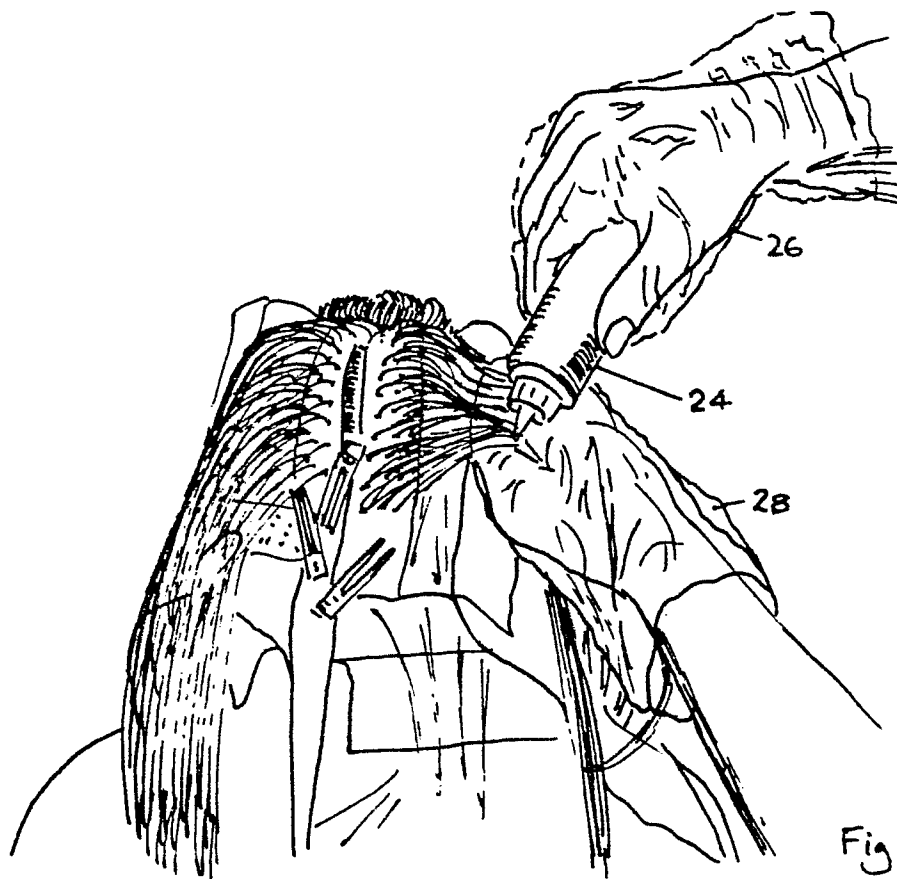


Fig. 2

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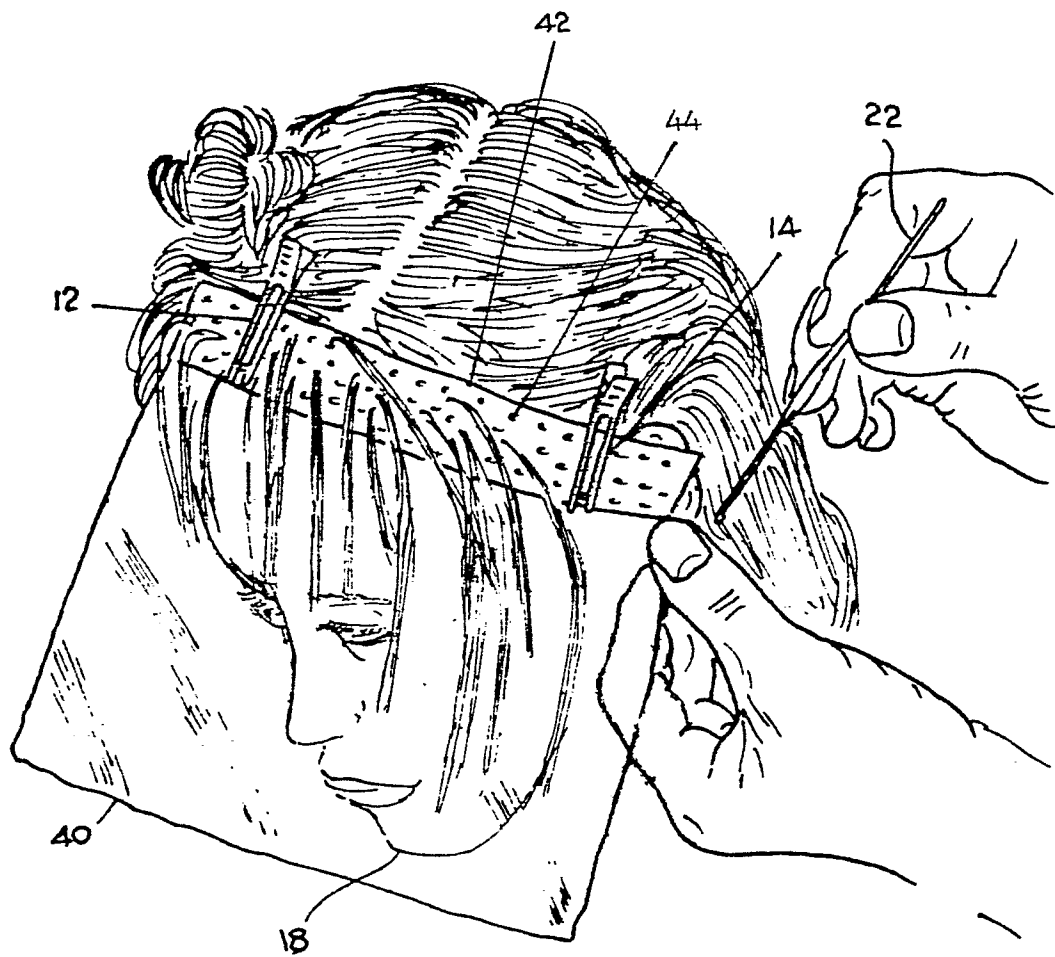


Fig. 5.