

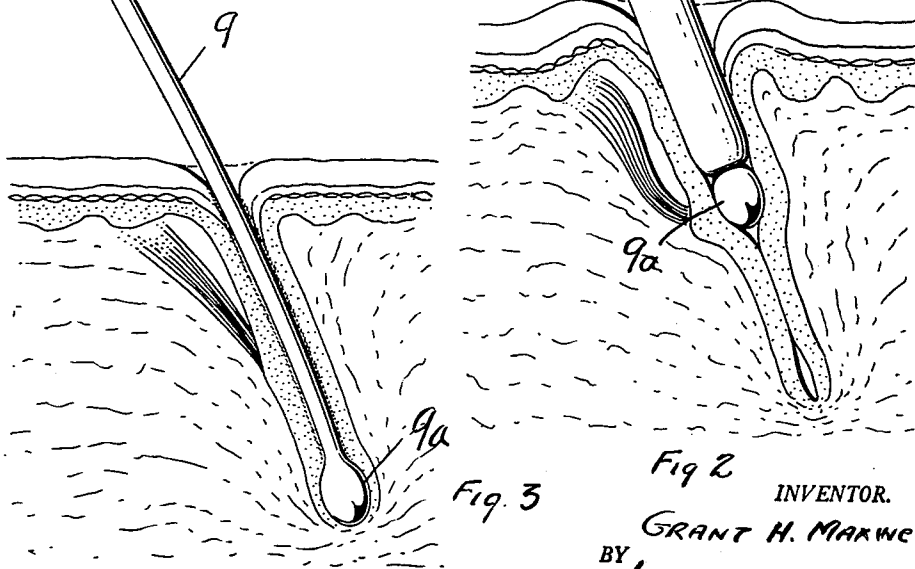
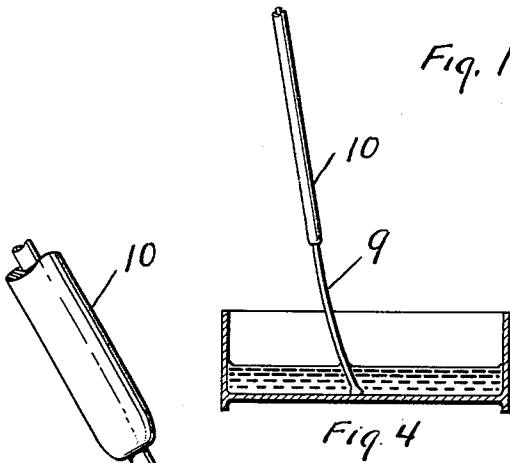
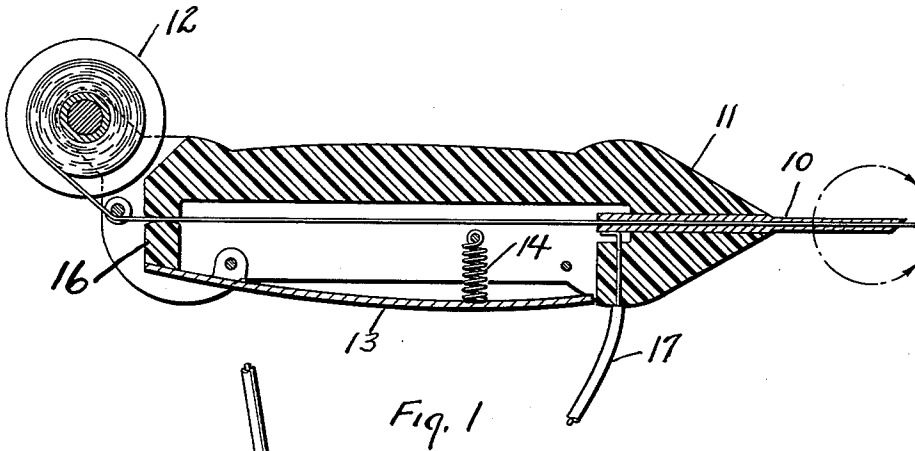
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METHOD OF IMPLANTING FIBERS IN THE SCALP

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1

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METHOD OF IMPLANTING FIBERS IN THE SCALP
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This invention relates to planting fibers in the skin and more particularly to a method and apparatus for inserting hairs, either natural or synthetic or vegetable into the natural hair follicles of the skin, and especially of the scalp.

As is well known, many people object to baldness and wish to substitute therefore a full head of hair. Various methods of satisfying this desire have been suggested and the most common is the conventional hairpiece. However conventional hairpieces have an artificial look and are usually readily detected. Thus their owner and wearer finds them unsatisfactory.

It is an object of this invention to actually replace fibers in the scalp in such profusion and number as to simulate a natural head of hair.

It is an object of this invention to provide a method and apparatus for planting such fibers in the human head.

Other objects and advantages of the invention will appear from the following specification in conjunction with the accompanying drawings in which:

FIGURE 1 is a cross-sectional detail of a device for inserting a fiber into a scalp.

FIGURE 2 is an enlarged view of the end of a needle showing a fiber being inserted in a follicle.

FIGURE 3 is an enlarged view showing the fiber planted and the needle being removed.

FIGURE 4 shows the fiber being inserted in a solvent to deform the end of the fiber.

The human scalp has a multitude of natural follicles. My method contemplates preparing a fiber in such a manner that is first provided with an enlarged portion on that end which is to be inserted into the follicle and then is inserted into the follicle. A small electric charge is then applied to the interior walls of the follicle surrounding the fiber, creating scar tissue which will materially decrease the diameter of the follicle and frictionally engage the fiber in such a manner as to retain the fiber in the follicle. The fiber is then cut to the desired length.

The apparatus for performing this function is illustrated particularly in FIGURE 1. The device consists primarily of a needle 10 which is provided with a suitable handle 11 from which it is insulated. The handle 11 supports a reel 12 adapted to hold a length of fiber 9 which is adapted to be led through and to extend from the open or remote end of the needle 10. A suitable brake is provided in the form of a pivoted lever 13 which is urged by spring 14 into normal engagement with the fiber passing through the needle 10. By simply actuating the handle portion 16 the member 13 will be released from engagement with the fiber.

The needle is connected by a suitable lead 17 to a source of low voltage electric current which is not shown but which may be supplied from any conventional source such as a battery, generator or the like and which is properly connected to ground in the normal manner. Operation of the device may be described as follows: When the fiber 9 has been urged through the needle 10 substantially as shown, the member 13 is caused to engage the fiber 9 to prevent it from moving with respect to the needle. The exposed end of the fiber 9 is then dipped in

2

a suitable solvent or softening agent which softens and serves to deform that end of the fiber to provide an enlarged portion 9a as shown in FIGURES 2 and 3. The operator then picks up the entire assembly and selects a follicle in which the fiber is to be planted. The follicle may be opened by the application of heat or by massage and a disinfectant applied. When the follicle has been opened the needle 10 and enlarged portion 9a of the fiber 9 are urged into the follicle until the operator feels that the enlarged portion 9a is in contact with the bottom of the follicle. A light charge of electric current is then applied to the side walls of the follicle, the current passing through the follicle and to ground through the patient's body, which obviously must be grounded during this operation, whereby the side walls of the follicle are slightly burned. The handle 16 is then operated to free the fiber 9 so that the needle 10 may be slid out of the follicle without removing the fiber.

After the fiber has been cut to the desired length, I find that it may be desirable to apply collodion or some similar material to the scalp around the follicle. This serves to hold the fiber in position in the follicle until the formation of scar tissue along the side walls of the follicle.

It will be apparent that I have provided a novel means of securing a fiber in a follicle.

While I have previously described the preferred embodiment of my invention it is to be understood that the fiber may be either natural, synthetic or vegetable. For example, I have used hairs from animals which have been previously treated with a disinfectant and preservative such as a 40% aqueous solution of formaldehyde. I have also used fibers or hairs made from synthetic materials such as nylon, Dacron or other materials and have used vegetable fibers, as for example, hemp. The enlarged portion which I have previously described in this invention may be formed either as previously described, that is, by means of a solvent or softening agent which provides a spherical smooth bulbous end or it may be an enlarged end as may be produced by knotting, or, as in the case of synthetic hairs, by actually molding the hair in this shape during its process of manufacture. Other deformed shapes may be provided by knotting or by securing another member to the fiber and by this I refer to a small gold or other suitable metallic barb-like member.

I have also described in the preferred embodiment the production of scar tissue through the utilization of diathermy cautery. I have also utilized galvanism cautery and chemical burning.

I claim:

1. A method for implanting fibers in the follicles in human skin consisting of: opening a follicle; inserting into the follicle a fiber which has an enlarged portion on the leading end thereof; and reducing the size of the opening in the follicle by scarring the inside walls of the follicle to form scar tissue on only said inside walls to engage the fiber and retain the same in position.

2. A method for implanting fibers in the follicles in human skin consisting of: opening a follicle; inserting into the follicle an electric needle carrying a fiber which has an enlarged portion on the leading end thereof; applying the discharge of an electric current to the inside wall of the follicle by way of the needle to form scar tissue on only said inside wall to engage the fiber and retain the same in position upon withdrawal of the needle; and withdrawing the needle.

3. The method of claim 2 wherein heat is applied to the skin to open the follicle.

4. A method for implanting fibers in the follicles in human skin consisting of: opening a follicle; inserting into

3

the follicle a needle carrying a fiber which has an enlarged portion on the leading end thereof; reducing the size of the opening in the follicle by scarring the inside wall of the follicle to form scar tissue on only said inside wall to engage the fiber and retain the same in position upon withdrawal of the needle; and withdrawing the needle. 5

4

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