Aug. 13, 1946. H. C. ARMAGOST 2,405,547

INGROWN NAIL CORRECTING DEVICE

Filed April 26, 1945

Fig. 1.

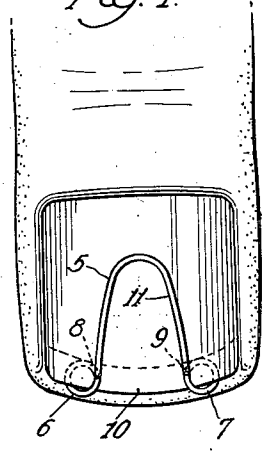


Fig. 2.

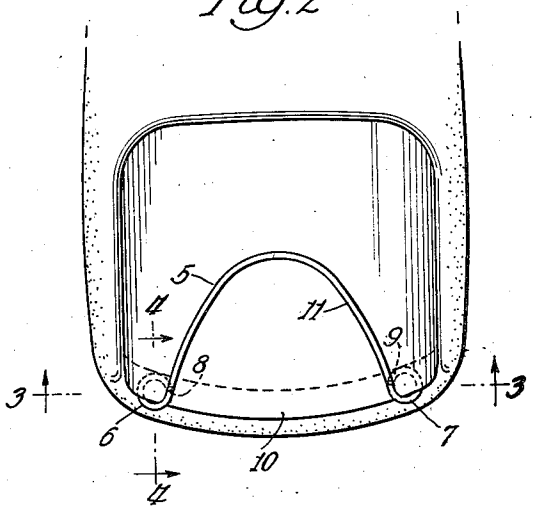


Fig. 3

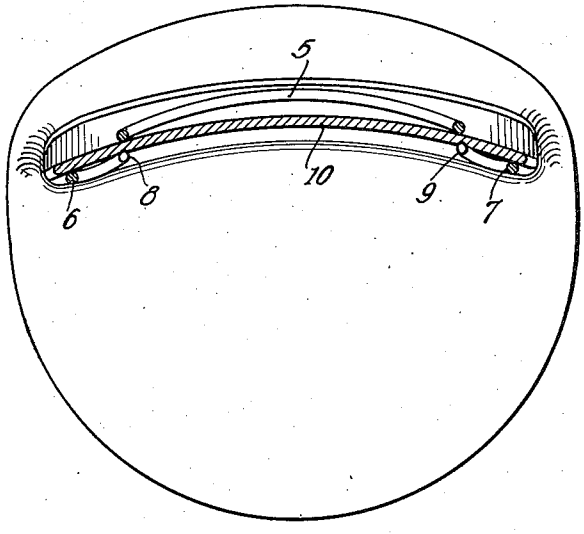
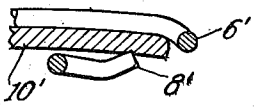


Fig. 4.



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INGROWN NAIL CORRECTING DEVICE

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2 Claims. (Cl. 128—81)

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The present invention relates to devices for treating ingrown toenails for the purpose of relieving the pain caused by the nails and causing the nail to grow in such a manner as to overcome the difficulty.

It is also a purpose of my invention to provide a novel spring clip which is adaptable to a variety of sizes and shapes of ingrown nails and may be fastened to bridge any portion of the front edge of the nail. The device when fastened to the nail without any extraneous fastening means will oppose removal thereof with sufficient tenacity to prevent the device from coming off in the normal activities of the wearer.

The nature and advantages of my invention will appear more fully from the following description and the accompanying drawing wherein a preferred form of the invention is shown. It should be understood however that the drawings and description are illustrative only and should not be taken as limiting the invention except insofar as it is limited by the claims.

In the drawing:

Figure 1 is a plan view of the appliance showing it applied to a toenail;

Figure 2 is a plan view similar to Figure 1 but showing the device applied to a different size and shape of toenail;

Figure 3 is an enlarged sectional view taken on line 3—3 of Figure 2; and

Figure 4 is a fragmentary sectional view when on the line 4—4 of Figure 2 showing a slightly modified form of the invention.

Referring now to the drawing the device shown is composed of a spring wire which preferably is of a material that will not corrode or rust. For example, a stainless steel spring is satisfactory or I may make the spring of ordinary steel and plate it with chromium. The spring 5 is originally made substantially in a modified V shape with its opposite ends 6 and 7 bent outwardly into spiral loops. The ends 6 and 7 have their tips 8 and 9 brought into close proximity to the wire itself. They may be placed directly under the wire or offset to either side thereof slightly without affecting their operation. The tips 8 and 9 are cut in such fashion as to cause them to project toward the observer as seen in Figure 1, so as to give a securing end that will engage underneath a nail 10 and press into the nail material a sufficient distance to anchor the device against accidental removal in the normal activity of the wearer. The showing in Figure 3 illustrates how the tips 8 and 9 engage the nail.

The variation in the showings of Figures 1 and 2 illustrate how the loop portion 11 of the spring wire 5 may be expanded and contracted to adapt the device to a great variety of sizes of nails. In all such variations the device presses down on the mid part of the nail and lifts up on the tip of the nail where the loops 6 and 7 are inserted. The bending of the loops 6 and 7 outwardly and spirally causes these loops, when hooked under a nail edge, to exert a twisting force on the spring that makes the mid portion push down on the nail while the loops are urging the edges to flatten out.

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I am aware of course, that a great number of devices of this character have been developed. My device however, differs from any of the prior art within my knowledge because it provides a one piece spring wire appliance that can be fitted upon a great variety of sizes and shapes of nails and that has its own means at the tip ends of the piece of spring material for preventing its removal from the nail.

My device embodies also a novel feature in the construction whereby the formation of the loops insures the application of forces in the right direction to tend to straighten the nail and move the parts that are engaging the flesh in such a direction as to relieve the pain and discomfort. The device has the further advantage that all the forces used in lifting the nail are confined to the device and to the nail itself. Therefore the device is free to move with the nail and does not impede the normal growth of the nail. The device has also the advantage that it is made of round smooth wire with a minimum amount of danger of injuring the flesh with which it comes in contact. Variations in nail thicknesses are taken care of by the loop construction at each end of the spring.

In Figure 4 I have shown a slight modification where, instead of cutting the tips 8 and 9 on a diagonal to make them dig into the nail, I have cut the tips of the loops straight across. The end portion of the loop 6' is bent up slightly so that the top edge of the tip 8' is positioned to dig into the nail 10' and thus hold the device in place.

From the foregoing description it is believed that the nature and advantages of my invention will be readily apparent to those skilled in the art.

Having thus described my invention, I claim:

1. An appliance for correcting ingrown nails and other malformations of the nails, comprising a spring wire of modified V-shape form and having its end portions curved spirally outward

and then rearwardly toward the base of the V form then inwardly to proximity to the wire to provide portions adapted to be placed beneath the front edges of the nail, whereby the portions of the wire adjacent to the spirally curved portions resting on the nail press it downwardly while the rearwardly extended parts of the end portions press the outer side edges of the nail upwardly.

2. An appliance for correcting ingrown nails and other malformations of the nails, comprising a spring wire of modified V-shape form and having its end portions curved spirally outward and

then rearwardly toward the base of the V form then inwardly to proximity to the wire to provide portions adapted to be placed beneath the front edges of the nail, whereby the portions of the wire adjacent to the spirally curved portions resting on the nail press it downwardly while the rearwardly extended parts of the end portions press the outer side edges of the nail upwardly, said curved end portions having relatively sharp pointed tips pointed toward the nail surface against which they engage to hold the appliance in place.

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