May 26, 1931. M. P. KAUFMAN 1,806,998

MEANS FOR TREATING AND PROTECTING CORNS

Filed April 15, 1929

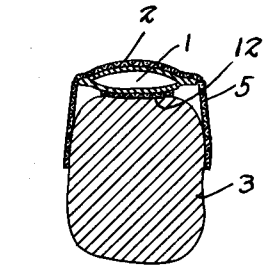


Fig. 1.

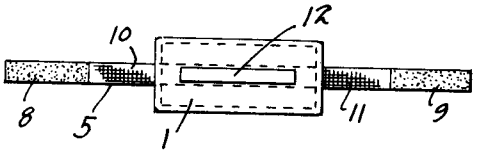


Fig. 2.

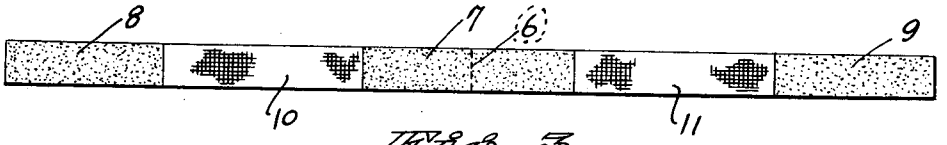


Fig. 5.

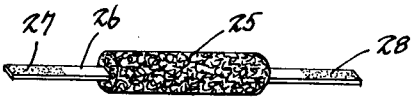


Fig. 4.

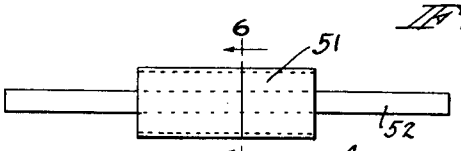


Fig. 5.

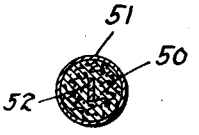


Fig. 6.

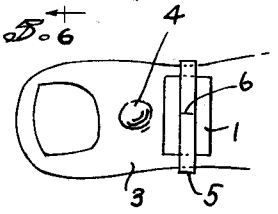


Fig. 11.

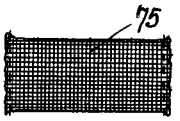


Fig. 7.

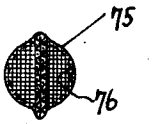


Fig. 8.

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UNITED STATES PATENT OFFICE

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MEANS FOR TREATING AND PROTECTING CORNS

Application filed April 15, 1929. Serial No. 355,222.

My invention relates to improvements in means for treating and protecting corns, and it consists in the combinations, constructions and arrangements hereinafter described and claimed.

An object of my invention is to provide means for treating and protecting corns which is an improvement over the form of the device shown in my co-pending application Serial No. 144,538, filed October 27, 1926. In said application I show a sack-like member having flexible walls and being filled with a fluid such as air. This member is secured to a toe or other portion of the foot by a strip of adhesive tape that extends across the top of the member and has its ends secured to the foot, leaving free portions of the tape lying between the sack and the attached ends that permit a slight rolling movement of the sack member upon the foot.

In order to prevent the sack from moving from beneath the strip of tape and swinging into a position to overlie the tape, I provide a friction pad or piece that is secured to the underside of the sack and frictionally bears against the foot for preventing a sliding movement between the pad and the foot. In addition to this, I cover the free portions of the sticky side of the tape so as to prevent them from adhering to the foot in case they should be accidentally forced down upon the foot from undue pressure. Other forms of the device are illustrated in the drawings and described in the specification.

Other objects and advantages will appear as the specification proceeds, and the novel features will be particularly pointed out in the appended claims.

My invention is illustrated in the accompanying drawings, in which

Fig. 1 is a longitudinal section through the device and shows it attached to a toe;

Figure 1*a* is a top plan view of the device shown attached to a toe;

Figure 2 is a bottom plan view of the device;

Figure 3 is a plan view of the strip of tape;

Figure 4 is a modified form of the device;

Figure 5 is a plan view of another modified form of the device;

Figure 6 is a section along the line 6—6 of Figure 5;

Figure 7 is a plan view of still another modified form of the device; and

Figure 8 is an end elevation of Figure 7.

In carrying out my invention, I provide a sack-like member 1 that has flexible walls 2 preferably made of rubber or a like suitable material. The interior of the sack is filled with air, and then the sack is secured to a toe 3 in the manner shown in Figure 1. In Figure 1*a* I show how the sack 1 is positioned with respect to a corn 4. The function of the sack in preventing the shoe from striking the corn is as follows: The sack serves to raise the pressure-inducing portion of the shoe to a position relative to the corn so as to allow at all times for the main to-and-fro motion of the foot within the shoe, thereby causing the forces, friction and pressure to be taken up by walls of the protector and to give to the hard and unyielding deep structure a loose areolar tissue-like action or free riding motion.

The present invention consists in the specially designed strip of tape that secures the sack to the toe so that the sack will have a free rolling movement on the toe of two to four millimeters back and forth.

The tape 5 is provided with a marking 6 at its midpoint, and is further provided with a sticky portion 7 that is centrally disposed and sticky portions 8 and 9 that are disposed at the ends of the tape (see Figure 3). The portions 10 and 11 separating the sticky portions are free of any adhesive substance. This may be accomplished by applying pieces of gauze over the sticky side of the tape that will form the portions 10 and 11, or the sticky substance may be removed from the tape for forming these portions. In the present form of the device, I have shown strips of gauze 10 and 11 secured to the tape as shown.

A strip of tape 5 is secured to the sack 1 by first centering the mark 6 with respect to the center of the sack 1 and then pressing the tape down upon the sack so as to cause the sticky portion 7 to adhere to the top of the sack. A small piece of adhesive tape 12 may

be secured to the under side of the sack 1 as shown in Figure 2. The sack is now placed upon the toe or other part of the foot so as to cause the piece 12 to contact with the foot. The ends 8 and 9 are now secured to the foot. The sack will have a free rolling movement on the foot due to the free portions 10 and 11 of the tape. The strip 12 will prevent the sack from rolling from beneath the tape into a position overlying it. The walls of the sack are flexible and merge one into the other during the rolling of the sack. In this way the sack acts very much in the same manner as a ball bearing in a machine. The sack rolls between the foot and the shoe, and there is on sliding movement of the sack on the foot or the shoe.

In Figure 4 I show a modified form of the device. A roll of cotton 25, sponge-rubber, or other suitable soft material, surrounds a strip of tape 26. It is obvious that the tape may be secured to the outer side of the roll 25 if desired without departing from the spirit and scope of my invention. The ends 27 and 28 of the tape are sticky so as to adhere to the foot. This form of the device operates in the same manner as the form shown in Figure 1 and needs no further description.

Figures 5 and 6 show a molded sponge-rubber 50 formed from a sort of rubber dough in which the gases are liberated from the interspaces as in the case of bread. The outer surfaces is then covered with a skin of rubber 51. A strip of tape 52 extends through the center of the device. The device will take an oval shape when pressure of a shoe is applied.

Still another modified form of the device is shown in Figures 7 and 8. Woven tubes of fabric 75 filled with cotton or lamb's wool 76 are cut in desired lengths and then the ends of the outer fabric are elongated and stitched together, giving a cushion-like shape. Lamb's wool has the advantage of keeping its springiness even though moist with perspiration.

Although I have shown and described several embodiments of my invention, it is to be understood that the same is susceptible of various changes, and I reserve the right to employ such changes as may come within the scope of the invention as claimed.

I claim:

1. A corn protector comprising a substantially cylindrically-shaped slightly compressible soft member, and a tape for securing it to a foot with freedom of rolling movement within predetermined limits, said tape being secured to the top of the member and having its ends secured to the foot, the portions of the tape lying between said member and the attached ends of the tape being free of adhesive material.

2. A corn protector comprising a soft slightly compressible member, a strip of tape secured to the top of the member and having its ends secured to a foot for allowing a rolling movement of the member, and a strip secured to the underside of the member for contacting with the foot and preventing a sliding movement between the member and the foot.

3. A corn protector comprising a soft, slightly compressible member, a fastening strip secured to said member and to a foot for allowing a rolling movement of the member, and a strip secured to the underside of the member for contacting with the foot and preventing a sliding movement between the member and the foot.

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