

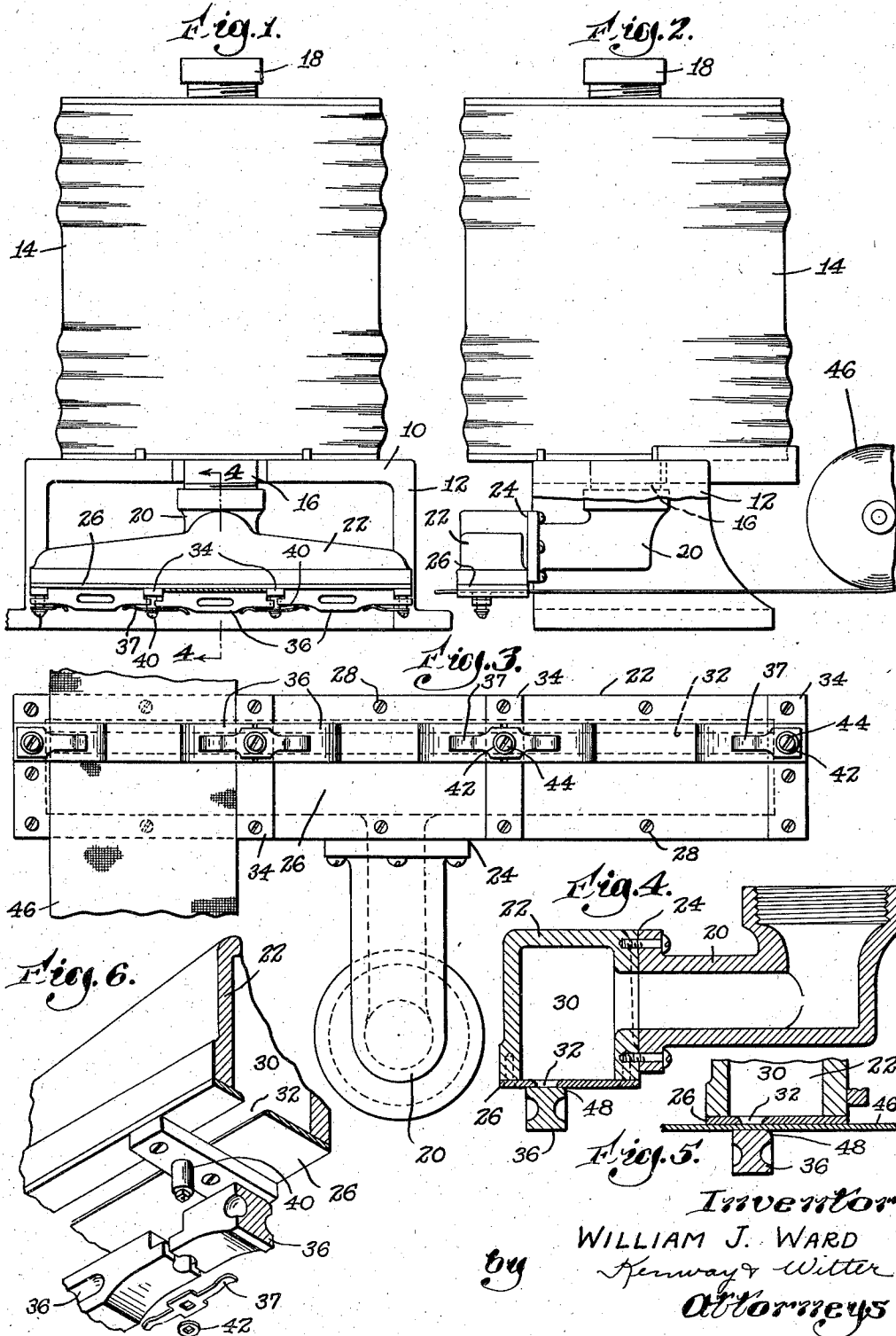
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STRIP TREATING APPARATUS

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STRIP TREATING APPARATUS

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This invention relates to devices for treating fabric strip material with an adhesive or the like. In the manufacture of insoles for shoes, fabric strips are coated with an adhesive and then applied to the sole pieces as a reinforcement. Devices heretofore employed for this purpose have most commonly comprised a reservoir for the adhesive and mechanism attached thereto and through which the strips may be drawn and thereby coated with the adhesive. One object of my invention is the production of an improved device of this nature so constructed so that it serves the strip treating function more conveniently, can be manufactured with greater economy and facility, and is adapted furthermore to receive a standard shipping drum containing the adhesive whereby effecting a considerable saving in labor and convenience.

My novel strip treating apparatus more particularly embodies an elevated supporting platform for the adhesive container and a detachable strip treating member cooperating therewith and therebeneath, the member preferably being of L-shape whereby locating the strip treating portion thereof conveniently to one side of the container. Furthermore, this detachable member is preferably constructed in a plurality of pieces conveniently and simply assembled whereby facilitating the manufacture of the device and providing a superior product. The production of a strip treating apparatus embodying these novel and useful features comprises a further object of the invention.

These and other features of the invention will be best understood and appreciated from the following description of a preferred embodiment thereof, selected for purposes of illustration and shown in the accompanying drawing in which,—

Fig. 1 is a front elevation of a device embodying my invention,

Fig. 2 is a side elevation thereof,

Fig. 3 is an enlarged bottom plan view of the adhesive distributing portion of the device,

Fig. 4 is a sectional view taken on line 4—4 of Fig. 1,

Fig. 5 is a fragmentary section view showing the use of the device,

Fig. 6 is a fragmentary perspective view of a portion of the device in disassembled relation.

In the drawing, 10 indicates an elevated platform or support resting on legs 12. An adhesive container 14 rests on the support and has an outlet portion 16 extending downwardly through the platform. The adhesive supply may be maintained through an opening ordinarily kept closed

by a screw cap 18 or the container may be provided with but a single adhesive receiving and exit opening at one end if desired.

An adhesive distributor comprising an L-shaped portion 20, threaded to and supported by the container outlet 16, and a chambered portion 22 bolted together at 24 depends from the container. The bottom wall of the portion 22 preferably comprises a plate 26 held in place by screws 28, a chamber 30 thus being formed within the member. A slot 32 is formed longitudinally of and through the plate to points approaching the ends thereof.

It will be understood that the fabric strips above referred to and which are to be treated are produced in different standard widths and it is desirable that the treating device shall be made to accommodate strips of these different widths. Accordingly, I divide the long slot 32 into three sections of different lengths and construct each of such sections to accommodate a strip of corresponding width. Cross pieces 34 are secured to the outer face of the plate 26 and in such relatively spaced relation as to provide channels therebetween for receiving the strips. It will be apparent that the cross pieces extend transversely of the slot 32 and, as illustrated, produce channels of three different widths, a portion of the slot 32 being within each channel.

Each slot portion within the channels is normally closed by a bar valve 36 under the action of springs 37, each bar preferably having a flat face normally resting against the flat outer face of the plate surrounding the slot and thereby closing the slot (Fig. 4). The ends of the bars are formed to fit against and over the cross pieces and in cooperating relation with studs 40 carried by the cross pieces, the studs acting as guides for the bars. Leaf springs are preferably employed and are held in place on the studs by means of washers 42 and screws 44. It will be apparent that these springs 37 normally hold the bars 36 in closed position over their respective slots.

The device illustrated is adapted to accommodate strips of three different widths, the strips being drawn from rolls 46 at the rear. The strips are initially threaded through the channels and beneath the bars 36 before placing adhesive in the container, or the container may be placed on its side in position elevating the slots to a point above the adhesive level. When the strips have been thus threaded, they are held in compressed condition between the bars 36 and plate 26 whereby no adhesive is allowed to escape (Fig. 5). As the treated strip is required for use, it is drawn forwardly in the direction of the arrow, Fig. 5,

whereupon the adhesive contacting with its upper surface treats the same. The rear corner of each bar may be rounded off at 48 to facilitate the passage of the strip. It will be apparent that the bars not only serve to keep the adhesive from escaping, but also that, in conjunction with the edges of the plate 26 at the slot, the bars serve as "doctors" scraping the adhesive so that a limited and uniform amount thereof is left on the strips.

The cross pieces 34 provide definite strip receiving channels therebetween and the edges of such pieces act as guides to the edges of the strips during their passage through the channels.

It will be apparent that the adhesive distributor, shown in Fig. 4, is relatively simple and is quite independent of the container 14. This container as illustrated is a shipping drum which may have the distributor applied thereto merely by screwing it into place at 16 and the distributor may as readily be removed from an empty drum and applied to a full drum, whereby eliminating any necessity for pouring the adhesive from the shipping drum. It is furthermore apparent that the L-shape of the distributor locates the strip treating portion thereof to one side of the container where it is convenient to the operator. Also the distributor being of independent pieces 20, 22 and 26 facilitates the manufacture thereof and makes possible a superior product. Especial attention is called to the plate 26 which may be machined independently, including the providing of the slot 32 therein. This slot is conveniently broken up into suitable strip receiving channels merely by applying the cross pieces 34 in face to face contact with the plane bottom face of the plate, the side walls of these pieces acting to guide the strips through the channels. This construction together with the spring pressed bars 36 serves to produce a strip treating apparatus superior to such apparatus heretofore known and one which may be manufactured with increased facility and accuracy.

Having thus described my invention what I claim as new and desire to secure by Letters Patent of the United States is,—

1. A device for treating fabric strip with an adhesive, comprising a distributing member having a chamber therein and a slot through one wall of the member and into the chamber, relatively spaced pieces carried by the member at opposite sides of and bridging the slot and forming a plurality of channels of different widths extending across the slot, said pieces dividing the slot into a plurality of slots respectively in said channels, a plurality of bars respectively in said channels, and springs carried by said pieces and normally holding the bars in position closing said slots but permitting sufficient outward movement

of the bars to allow the passage of fabric strips across the slots between the bars and the chamber.

2. A device for treating fabric strips with an adhesive, comprising a distributing member having a chamber therein, a separate plate forming a wall of the chamber and having a plurality of relatively spaced slots of different lengths and in longitudinal alignment extending therethrough, outwardly projecting posts respectively at the ends of the slots, bars located respectively over the slots and mounted to slide on the posts toward and from the slots, and springs carried by the posts and acting on the bars to normally hold them in slot closing contact against the plate, the bars being movable from such position sufficiently to permit the passage of strips across the slots between the bars and the chamber.

3. A device for treating fabric strip with an adhesive, comprising a base having an elevated platform thereabove, an adhesive container resting on the platform and having a port through its bottom wall, a distributing member beneath the container and having an elongated chamber at its forward portion and a rearwardly extending portion having a port in communication with the chamber, screw threads for disengageably joining said ports whereby providing communication from the container to the chamber, the distributing member having an elongated opening through one wall thereof and into the elongated chamber, a bar in position acting as a valve to close the elongated opening, and resilient means normally holding the bar closed over the opening but allowing sufficient movement thereof to permit the passage of the strip across the opening between the bar and the chamber.

4. A device for treating fabric strip with an adhesive, comprising a tubular L-shaped member having a threaded open end portion adapted to be screwed onto an annular threaded outlet carried by and projecting outwardly of the bottom wall of an adhesive container, a relatively angular pipe-like conduit portion for conducting the adhesive laterally from the container, an oblong chambered member secured to the free end of the conduit portion and in communication therewith, the chambered member being substantially wider than the conduit portion and its bottom wall having a slot therethrough and extending longitudinally thereof, a bar over the outer face of the slot, and resilient means normally holding the bar closed over the opening but allowing sufficient movement thereof to permit passage of the strip across the opening between the bar and the chamber.

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