June 29, 1965 E. W. COMER ETAL 3,191,187

GLOVE

Filed Oct. 28, 1963

Fig. 1.

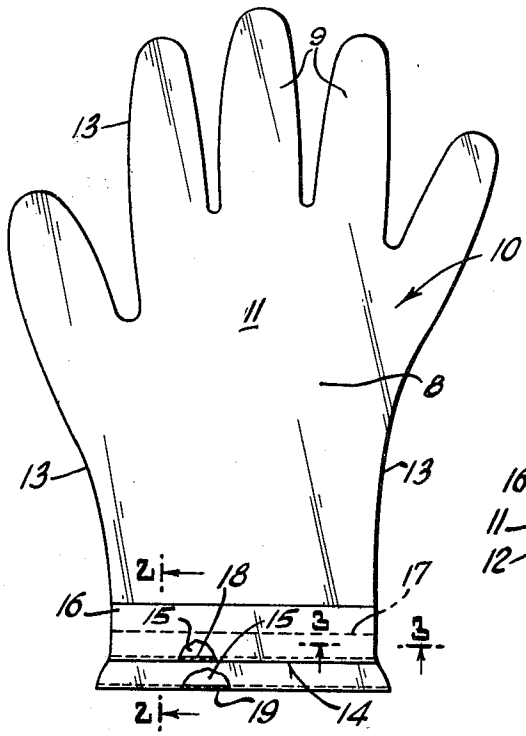


Fig. 2.

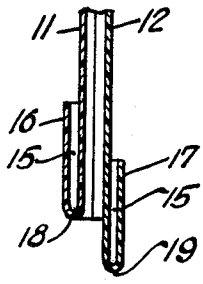


Fig. 3.

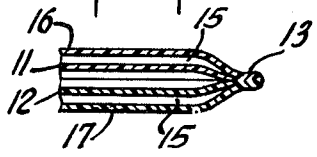


Fig. 4.

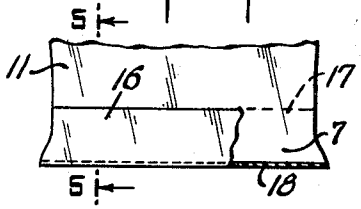


Fig. 5.

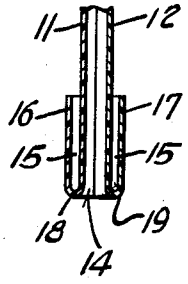
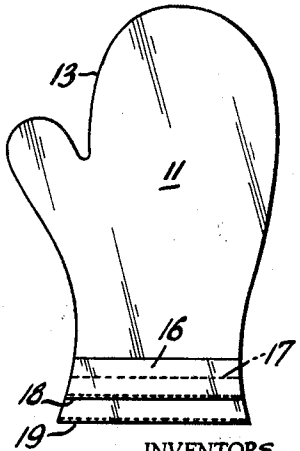


Fig. 6.



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3,191,187

GLOVE

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The portion of the term of the patent subsequent to Apr. 20, 1982, has been disclaimed
2 Claims. (Cl. 2—167)

This invention relates to gloves formed from thermoplastic sheet material and more particularly to disposable plastic gloves provided with a turned up cuff at the wrist.

In the Gerard Patent No. 3,028,576 there is disclosed a disposable glove which is formed of thin sheets of plastic material such as polyethylene. Such gloves are inexpensive to manufacture and have found wide use by physicians, beauticians, houseowners, and others who wish to protect their hands but wish to avoid the unpleasant and time-consuming task of cleaning and powdering gloves between each use, as is now the standard practice when rubber gloves are used.

It is a disadvantage of the disposable plastic gloves presently on the market that when one works with the hands in an overhead posiition, as is necessary for example in painting a ceiling, excess liquid may flow down the glove and onto the wrist and arm of the workman. It is within the contemplation of this invention to provide a disposable plastic glove or mitten having a cuff at the wrist that extends toward the finger region; whereby liquids running down the glove will be arrested before they come in contact with the wrist and arm of the wearer.

It is therefore an object of this invention to provide a flexible plastic glove that has a folded cuff disposed to catch liquids running down the surface of the glove.

It is another object of this invention to provide a plastic glove with a cuff at the wrist, so low in cost that it may be discarded after a single usage.

Still another object of this invention is to provide a glove that is reinforced with a double layer of plastic at the wrist.

Other and further objects and advantages of the present invention will be apparent from the following detailed description, drawings and claims. In the drawings:

FIGURE 1 is a plan view of a disposable glove in accordance with this invention.

FIG. 2 is a vertical section taken along line 2—2 of FIG. 1.

FIG. 3 is a horizontal section taken along line 3—3 of FIG. 1.

FIG. 4 is a partial plan view of a disposable glove illustrating a modification of the present invention.

FIG. 5 is a vertical section taken along line 5—5 of FIG. 4; and

FIG. 6 is a plan view of a mitten having the structure of the present invention.

Referring to FIGS. 1 and 2 of the drawings, the glove of this invention is shown at 10 and comprises two pieces 11 and 12 sealed along outer side edges 13 and along all other edges with the exception of an opening 14 at the wrist 7 of the glove which is left unsealed to form an opening for the hand. The pieces 11 and 12 are preferably formed of an inexpensive thermoplastic material such as polyethylene although other flexible thermoplastic materials such as polyvinyl chloride may be used. The thickness of the thermoplastic material should be

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such as to provide tactile sensitivity and is preferably in the range of 0.75 to 2 mils. Polyethylene, 1 mil in thickness, is non-porous and also sufficiently low in cost to be very practical.

The glove illustrated in FIGS. 1 and 2 is formed with a metacarpal receiving portion 8 with finger stalls 9 extending from one end thereof and with the wrist portion 7 extending from the other end thereof and with what will be referred to as an offset cuff 15 in that the back side 12 extends below the palm side 11 of the wrist opening. The offset cuff facilitates insertion of the hand of the wearer. Moreover, the double layer of plastic that forms the cuff 15 minimizes rolling of the cuff as the glove is donned. The cuff 15 is sealed at its two edges as best illustrated in FIGS. 2 and 3. It will be seen that the sealed edge 13 protrudes outwardly from the remainder of the glove to a slight degree. It is preferable that this sealed edge be no greater than 0.01 inch wide.

Methods and apparatus for making thin plastic gloves from two sheets of thermoplastic material are described in the Gerard patent referred to above. From FIG. 1 of that patent it will be apparent that the gloves of the present invention may be manufactured on the Gerard machine if the knife 48 is eliminated and the two continuous plastic webs 4 and 6 are folded longitudinally prior to forming the glove. In adapting the Gerard process to the manufacture of a glove having a cuff, the two webs of plastic 11 and 12 must be fed to the rollers 24 and 26 with their edges 16 and 17 folded in opposite directions, as indicated in FIG. 2 of the present application. The amount by which the cuff is offset (the distance that the back side extends below the palm side of the wrist opening) may be controlled by the relative position of the folded edge 18 with respect to the folded edge 19 as the plastic passes between the feed rollers 24 and 26 (see FIG. 1 of the Gerard patent).

FIGS. 4 and 5 of the present application illustrate a modification of the present invention wherein the cuff is not offset. Such a glove is formed by positioning the plastic webs so that the longitudinal folds 18 and 19 that form the palm and back side of the cuff are in alignment.

In FIG. 6 the invention is shown as applied to a mitten.

While the invention has been described and illustrated with reference to a specific embodiment thereof, it will be understood that other embodiments may be resorted to without departing from the invention. Therefore, the form of the invention set out above should be considered as illustrative and not as limiting the scope of the following claims.

What is claimed is:

1. A glove having front and back sections of thermoplastic film material joined along outer side edges to define a metacarpal receiving portion with a portion for the fingers extending from the metacarpal receiving portion at one end and having a wrist portion open at the top and extending from the metacarpal receiving portion at the other end, a first cuff portion extending from the top of the wrist portion to a free terminal edge to present a substantial area of said first cuff portion adjacent the outside face of the front glove section, a second cuff portion extending from the top of the wrist portion to a free terminal edge to present a substantial area of said second cuff portion adjacent the outside face of the back glove section, said cuff portions respectively being sealed to said front and back sections along lines coincident with the lines of joinder along said side edges; and being

free of said front and back sections in areas thereof between their terminal edges and the tops of their respective wrist portion, whereby there is presented cuff pocket means opening in a direction away from the wrist portion and toward the metacarpal receiving portion of the glove.

2. A glove according to claim 1 wherein the wrist portion at the back section of the glove extends beyond the wrist portion at the front section of the glove whereby the cuff portions attached to said wrist portions are offset in a direction lengthwise of the glove.

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