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S. J. BURKE

2,083,684

RUBBER COATED GLOVE AND METHOD OF MAKING THE SAME

Filed March 29, 1935

Fig. 1.

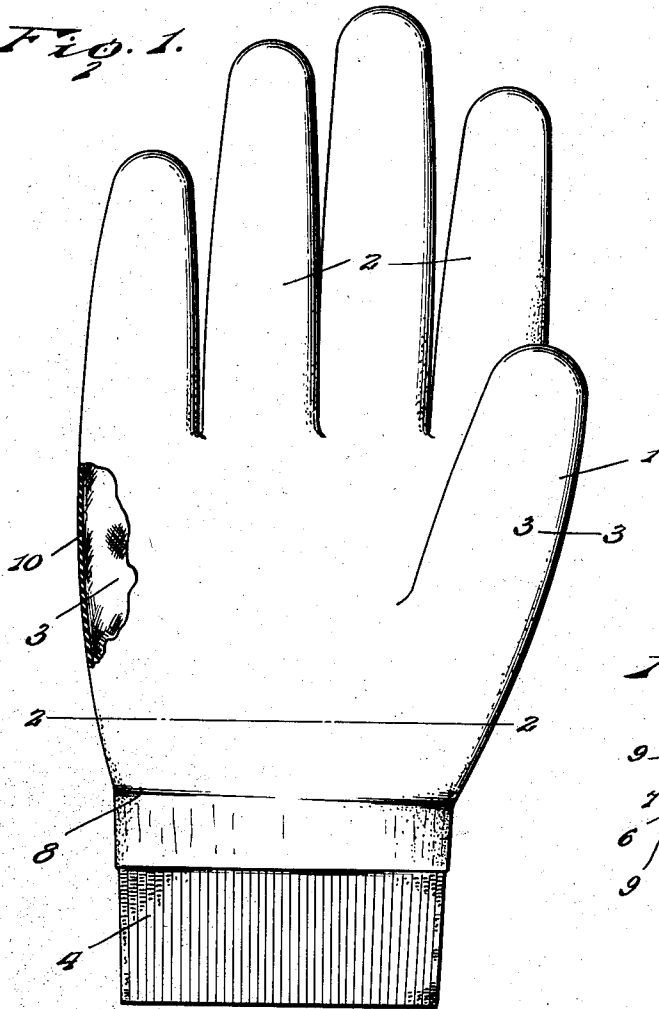


Fig. 3.

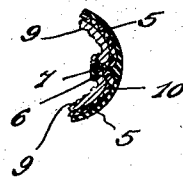
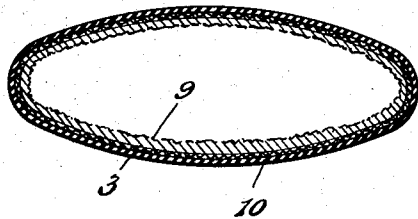


Fig. 2.



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RUBBER COATED GLOVE AND METHOD OF MAKING THE SAME

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Application March 29, 1935, Serial No. 13,752

1 Claim. (Cl. 2-168)

This invention relates to apparel and more particularly to a hand covering which may be in the form of either a glove or mitten and is treated to render it impervious to water or acid.

One object of the invention is to provide a rubber coated hand covering so made that the outer coating of rubber will overlie and completely cover seams formed when stitching portions of the fabric together and very effectively prevent water or acid working inwardly through the seams. Therefore, the water or acid will be prevented from contacting with a person's hands and also prevented from causing the fabric and the stitching to rot.

Another object of the invention is to so manufacture this glove that during the steps of applying the coating the glove will be retained in its proper shape and also the fabric prevented from shrinking.

Another object of the invention is to so apply the rubber that, while the outer surface of the glove will be entirely coated, the rubber will not extend entirely through the fabric and, therefore, the interior of the glove will be soft and warm.

The invention is illustrated in the accompanying drawing, wherein

Figure 1 is a view of a glove formed in accordance with this invention, the view being principally in elevation and partially in section.

Figure 2 is a section taken transversely through the glove along the line 2-2 of Figure 1.

Figure 3 is a fragmentary section taken transversely through the thumb along the line 3-3 of Figure 1 and illustrating the manner in which seams are covered and protected by the rubber coating of the glove.

This improved hand covering has been illustrated as a glove formed with the usual thumb and finger extensions 1 and 2, but it is to be understood that it may be in the form of a mitten if so desired. This hand covering has a fabric body 3 which may be of knitted material such as jersey or of woven fabric such as canvas, cotton flannel or the like. There has also been provided a wrist encircling portion 4 which is formed of knitted fabric in order that this wristlet may have transverse elasticity and fit snugly about a person's wrist. The body portion of the glove is formed from blanks or sections cut from the fabric and adjoining marginal portions of the sections are sewed together, as shown in Figure 3, where the two sections 5 have been shown united by stitching 6 to form a seam 7 which extends inwardly of the glove. The wristlet is formed

from a section of tubular knitted material which is turned back upon itself until the end edges meet and provide an inner or forward end portion for the wristlet which is sewed to the rear of the body portion of the glove by an inturned seam indicated by the numeral 8 in Figure 1. It will thus be seen that when manufacturing this glove, a fabric glove of the type sometimes used by workmen will be first made, and if cotton flannel or a similar fabric having a soft fluffy face is used for making the body of the glove, the soft face will be disposed inwardly, as shown in Figures 2 and 3 and indicated by the numeral 9.

After the fabric glove or body has been made, it is placed upon a form corresponding approximately to the shape of a person's hand of the proper size to wear the glove and the glove while still on the form is dipped in a liquid rubber mixture which is self-curing and self-vulcanizing. The fabric of the glove absorbs a portion of the liquid rubber mixture but the liquid rubber, due to its texture, will not completely penetrate the fabric and, therefore, the body when completely coated with rubber will still have a soft inner surface and if cotton flannel or the like is used, the glove will have what is known as a fleece lining. The rubber coating, which is indicated by the numeral 10, completely covers the body portion of the glove and also extends partially along the wristlet, and by referring to Figure 3 it will be seen that the rubber coating extends well into the seams 7 and completely fills the seams. Therefore, water or acid cannot work inwardly through a seam as would be the case if the fabric from which the glove is made were first treated with the rubber coating and then cut to provide sections or blanks from which the glove is formed. In view of the fact that the rubber coating extends partially along the wristlet from its front end, the seam 8 connecting the wristlet and body of the glove will be fully protected but the uncoated portion of the wristlet will be permitted to expand and contract when the glove is put on and fit snugly about a person's wrist.

After the gloves have been dipped in the rubber compound, they are removed and the forms with the gloves still in place set in a drying room where they remain for a few hours. The temperature of the drying room is approximately 70 degrees Fahrenheit when the gloves are placed therein for drying, but after the gloves have been in this drying room for approximately one hour, the temperature of the room is gradually increased to a temperature of 90 degrees Fahrenheit. Air is circulated through the heated room

during the drying process by a fan or in any other desired manner. During the time the gloves are in the drying room, the heated air which is circulated in the room will cause the rubber compound to become self-cured and self-vulcanized and the finished glove will become covered with a coating of rubber of substantially even thickness. As previously explained, the rubber coating not only completely covers the exterior of the glove but also completely fills and seals the seams and prevents water or acid from working inwardly through the seams. The gloves when removed from the drying room are taken off of the forms which have retained them in the desired shape and prevented them from shrinking while drying and are then soap stoned to remove any roughness and tackiness from the surface of the coating and also causes the gloves to be flexible. Therefore, the gloves will be comfortable when worn and not only of service to those during work which requires dipping the hands in water or acid, but also since the coating is of rubber the gloves may be used by electrical workers to prevent danger of receiving electric shocks. Having thus described the invention, what is claimed as new is:

A hand covering comprising a woven fabric body having thumb and finger portions, a wristlet of knitted material having its forward end stitched to the rear end of said body and being transversely expansible whereby the wristlet may contract and have close fit about a person's wrist when the hand covering is worn, and a coating of pliable rubber entirely covering all portions of the outer surface of the body and having its rear portion extending in overlying relation to the forward portion of the wristlet and extending entirely about the same to cover and seal the stitched connection between the wristlet and the rear end of the body and cause the body and forward end portion of the wristlet to be water and acid proof, said coating covering only the forward portion of the wristlet and having its rear edge spaced forwardly from the rear end of the wristlet an appreciable distance whereby the coating may protect the forward portion of the wristlet without interfering with the elasticity of the uncoated portion of the wristlet.

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