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F. M. RANEY

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HAND PROTECTIVE DEVICE

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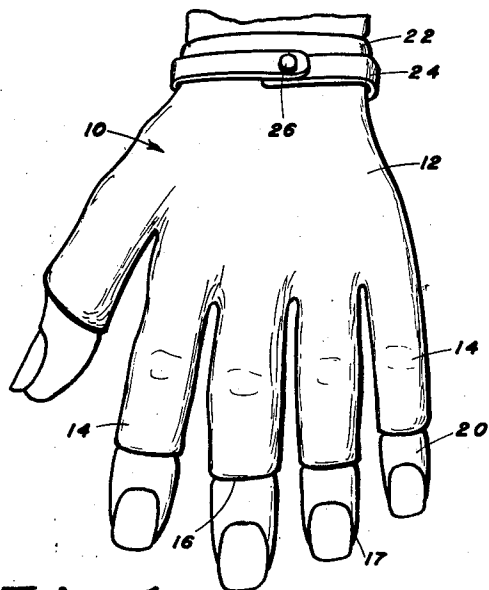


Fig. 1.

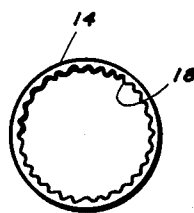


Fig. 3.



Fig. 4.

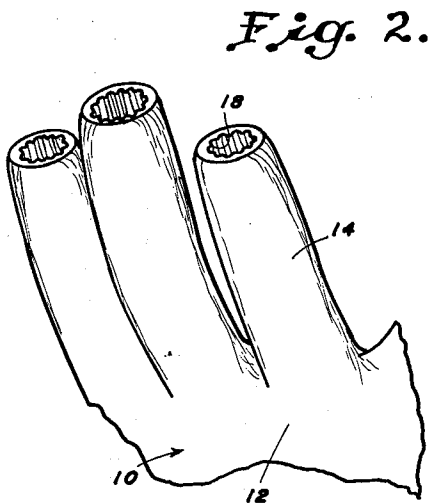


Fig. 2.

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HAND PROTECTIVE DEVICE

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1 Claim. (Cl. 2-159)

This invention relates in general to an improvement in hand protective devices, and more particularly, but not by way of limitation, to a glove which is specifically adaptable for protecting a hand from the adverse effects of continued exposure to liquid and simultaneously, greatly facilitating the use of the fingers.

It is well known to provide gloves for the protection of hands from the adverse effects of the elements, or friction, or the like. Gloves range in size and use from a heavy insulated rubber glove of a power lineman to the purely decorative soft leather glove of a woman. However, it has always been a problem to provide a glove which will protect a hand and yet permit maximum dexterity of the fingers. A surgeon uses a glove which completely covers his hands and that permits him to retain to a great degree his sensitive touch, and yet positively precludes for hygienic reasons contact of his hands with the objects grasped. It has been found that in the instances where it is desirable to maintain maximum dexterity of the fingers and yet not completely preclude contact of the hand with the subject, it is possible to eliminate a suitable portion of the glove. An example of this type of glove is a golf glove such as shown in United States Patent No. 1,915,617, issued June 27, 1933, to H. O. Potter which protects the hand from blisters and the weather and simultaneously allows the necessary contact of the fingers with a golf club. All gloves of this nature are necessarily well ventilated to preclude perspiration on the hand making the golf club slippery and hard to grip properly.

It is desirable in some instances to provide some means to protect a person's hands from the weather or water and still allow contact of the fingers themselves with an object. In one particular application, although not limited thereto, it is desirable to use the fingers in the shampooing of a person's hair and scalp and protect the hand proper and greater portion of the fingers from chapping, roughening, reddening and the like, which comes as a result of continual exposure of skin to soap, detergents and water.

The present invention provides a glove which precludes contact of the body portion of the hand and the greater portion of the fingers with water, detergent or whatever liquid in which the hand may be immersed. The glove comprises a body portion composed of rubber, plastic or the like and having a plurality of finger enclosing members depending therefrom. Means are provided on the glove around the wrist portion and the open ends of the finger portions to furnish a seal between the glove material and the hand, thereby precluding the leakage of any fluid into the glove proper where it could come into contact with the main portion of the hand. The finger enclosing members are truncated or cut off whereby the greater portion of the fingers is protected and the finger tips exposed for use in whatever application may be desirable.

An important object of this invention is to provide a glove which excludes fluids from the interior of the glove and that permits unencumbered use of the finger tips in appropriate environments.

Another object of this invention is to provide a glove which precludes leakage of a fluid into the interior of the glove when it is immersed in the fluid.

A further object of this invention is to provide a glove

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which allows maximum use of the fingers and facilitates the grasping of objects with the finger tips.

A still further object of this invention is to provide a glove which protects the hand and allows unimpeded use of the finger tips.

And yet another object of this invention is to provide a glove that protects the hand proper and simultaneously permits unencumbered use of the fingers.

Other objects and advantages of the invention will be evident from the following detailed description, read in conjunction with the accompanying drawings, which illustrate my invention.

In the drawings:

FIGURE 1 is a perspective view of a glove embodying the invention as it is worn upon a hand.

FIGURE 2 is a partially cut away perspective view of the glove depicting the finger portions thereof.

FIGURE 3 is an end view of one of the finger portions of the glove.

FIGURE 4 is a perspective view of a glove constructed in accordance with the invention as it may be used in the shampooing of a person's hair and scalp.

Referring to the drawings in detail, and particularly FIGS. 1 and 3, reference character 10 generally designates a protective glove having a main body portion 12 for enclosing the hand proper and a plurality of depending integral finger enclosing members 14. The finger members 14 are truncated or cut off at 16 and do not extend the full length of the human fingers 20. This allows at least the finger tips 17 of the fingers 20 to be exposed. The glove 10 may be composed of rubber, plastic, leather or any other material which possesses the necessary attributes of flexibility and durability. It is to be understood that when the glove is to be immersed in a liquid, the material chosen will be of a nature that is impervious to liquid and not adversely effected thereby.

The finger members 14 may be provided with suitable crimped portions 18 at the open ends 16 whereby when the fingers 20 of a human hand are positioned in said finger enclosing portions 14, a fluid tight seal will be effected between the fingers 20 and the finger portions 14 of the glove. It is within the scope of this invention to provide other means of furnishing a seal between the fingers 20 and the enclosing portions 14 and although a preferred embodiment of the invention would utilize crimped ends as a seal because of the inherent simplicity and inexpensive cost of production, other seal means could also be used. The fingers 14 of the glove 10 are truncated at a position which allows the finger tips 17 to be uncovered, but it is conceivable that there are applications of the glove 10 where the wearer would desire to have the entire portion of his fingers uncovered and only the hand proper protected. Therefore, this invention is not limited to finger portions 14 of a length so that only the tips of the fingers are exposed, but the present invention contemplates the provision of the finger portions of any desired length since the exposed finger portion desired may vary according to the specific use for which the glove is intended.

The wrist portion 22 of the glove 10 is preferably formed of a size sufficiently large to substantially approximate the size of the average wrist. The wrist portion 22 may also be provided with crimped portions (not shown) similar to the crimped portions 18 to effect a liquid tight seal between the wrist section 22 of the glove and a hand enclosed thereby. A strap member 24, having adjustable attaching means 26, such as a snap fastener or the like, may be secured to the wrist portion 22 whereby the wrist portion may be tightened against the wrist to provide further sealing against fluid leakage thereby. Thus, a wearer using the glove may immerse her hand in a liquid and preclude leakage into

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the interior of the glove. It is to be understood that while a specific method of sealing the wrist portion of the glove 10 is shown, it is well within the scope of this invention to provide other equivalent means of forming the wrist portion of the glove in order to preclude entry of liquid into the glove through that specific portion. Also, this invention further provides that the wrist portion 22 may be extended further up the forearm of a wearer so that it would not be necessary to provide a seal at the wrist portion, since this portion of the glove would not be in the area of the liquid.

FIGURE 4 shows a specific use for which the present invention is particularly adapted. In the shampooing of a person's hair 23, it is extremely desirable to use the finger tips 17 in massaging the scalp since only the particular surface provided by the fingers and especially the tips of the fingers is so well adapted for contact with the scalp. Mechanical devices of various types have been utilized in the past in the shampooing of hair, but have been found too bulky to comfortably use and have too harsh an effect upon the scalp. The use of the novel glove 10 enables a beauty operator to use her finger tips in the shampooing of a woman's hair and still protect her hands from the adverse effects of continued exposure to water, soaps and the like. The foregoing shows a particular instance of maintaining the unique surface and touch of the tips of the fingers while simultaneously protecting the hand proper from any adverse elements that may be present. Only one instance is shown, but there are many other applications where it is desirable to protect the hands from the elements and yet allow the tips of the fingers to be utilized in an ordinary manner.

From the foregoing, it is apparent that the present invention provides a novel protective glove which is formed in a manner to preclude liquid from entering the interior of the glove at either the wrist portion or any of a plurality of truncated finger enclosing members. The glove is provided with sealing means at the wrist portion and at each of the open ends of the finger portions thereby effecting a seal between portions of the hand and the glove. It can be readily seen that a novel

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device has been provided which is of great utility in facilitating the use of the fingers while simultaneously furnishing maximum protection for the greater part of the hand.

Changes may be made in the combination and arrangement of parts as heretofore set forth in the specification and shown in the drawings, it being understood that any modification in the precise embodiment of the invention may be made within the scope of the following claim without departing from the spirit of the invention.

I claim:

A glove comprising a main hollow portion adapted to completely encase the palm and back and sides of a hand of a wearer when said hand is positioned within the gloove, said main portion having an aperture for the passage of the hand therethrough into the interior of the glove, said aperture encircling the wrist portion of the wearer, the main portion also being provided with a plurality of depending finger enclosing portions, said finger portions provided with open ends to allow at least the portion of the fingers from the first joint to the end of the fingers to extend therefrom, strap means secured to the main portion in the proximity of the aperture for encircling the main portion to provide a liquid tight seal between the operture and the wrist portion of the wearer, and means on the interiors of the ends of the finger enclosing portions to provide a liquid tight seal between the open ends of the finger enclosing portions and the respective fingers of the hand.

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