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SAFETY MITTEN

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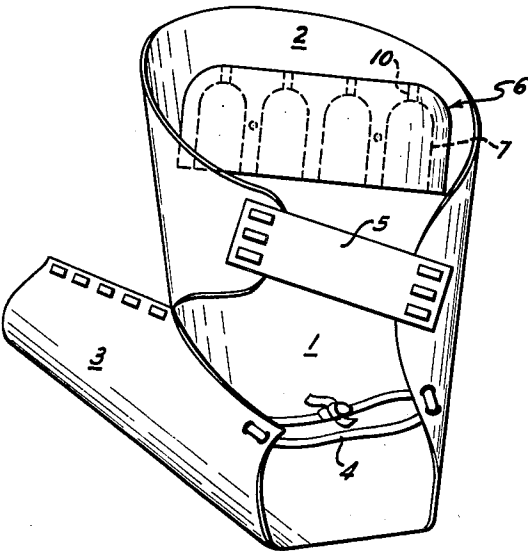


Fig. 1

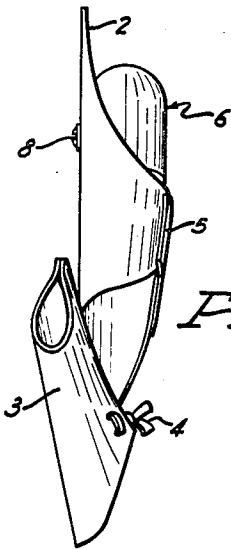


Fig. 2

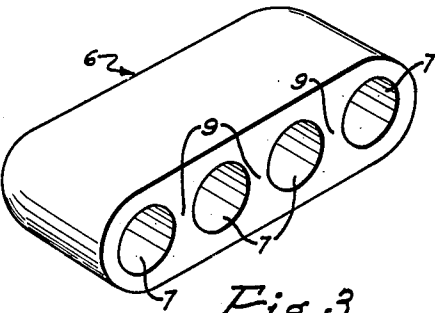


Fig. 3

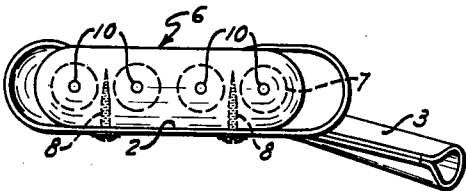


Fig. 4

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3 Claims. (Cl. 2—161)

This invention relates to hand pads of the type used by workmen while performing manual handling operations and is directed, more particularly, to a safety mitten of improved construction for preventing finger injuries by pinching or crushing.

In industrial operations requiring manual handling of work or equipment, leather hand pads are commonly used to protect the hands of workers against injury by abrasion or burning. In addition, and to further protect the worker's fingers against pinching or crushing, different forms of hollow shells or housings on such pads have been proposed. However, such proposals have not proved entirely effective and the problem of finger injuries by pinching or crushing continues to be troublesome, particularly in steel mill operations requiring the handling of slabs and other heavy objects and in the hooking and unhooking of crane operated chain hoists used for transporting such objects.

This invention accordingly has as its principal object the provision of an improved safety mitten in which the worker's fingers are encased in a block of material having a compressive strength adequate to prevent its being crushed under heavy loads or impact.

In the drawings there is shown a preferred embodiment in which:

Figure 1 is a plan view of a mitten for the right hand; Figure 2 is an elevation looking from the left of Figure 1;

Figure 3 is a perspective of the finger protecting block used in the mitten shown in Figure 1; and

Figure 4 is an end view looking from the top of Figure 1.

As shown in the drawings, the mitten comprises a pad of leather or other material having similar protective and wear resisting properties and has a contour conforming to the shape of a hand. It has a body portion 1 for protecting the wearer's palm, a finger portion 2, and a laterally extending side portion 3 which is doubled over and sewed to provide the usual thumb stall. To secure it in position, the heel of the palm portion 1 is provided with a thong 4 for fastening it over the wearer's wrist and its opposite edges are joined by a strap 5 that engages over the back of the wearer's hand.

A finger guard 6 is provided on the finger portion 2 to protect the wearer's fingers against pinching or crushing. The guard 6 is in the form of a rectangular block having spaced upper and lower surfaces with four sepa-

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rate finger receiving openings 7 arranged therebetween, which is secured to the finger portion 2 by screws 8 or other fastening devices in a position extending transversely of the portion 2 with the finger openings opening toward the heel of the palm portion 1 for the reception of the wearer's fingers. By reason of forming the finger openings 7 separately in the block 6, protective webs 9 are provided between each pair of openings 7 that furnish a lateral support for the wearer's fingers to prevent pinching or crushing under forces that may be heavy enough to compress the block 6. While the block 6 may be made of compressive materials, it is preferably formed of fiber, micarta, plastic, or other material that has sufficient compressive strength to prevent its being crushed under heavy force or impact.

The dimensions of the block 6 and length of the openings 7 are preferably such that the wearer's fingers will be received therein to a point adjacent the first joint of each finger. While this will provide maximum flexing movement of the wearer's fingers, it will be appreciated that openings 7 of greater length may be provided coverage for the fingers beyond the second joint.

As best shown in Figure 4, the block 6 is provided with smaller openings 10 extending axially from and communicating with the finger openings 7 to provide for ventilation thereof.

While one embodiment of my invention has been shown and described it will be apparent that other adaptations and modifications may be made without departing from the scope of the following claims.

I claim:

1. A safety mitten comprising thumb, finger and palm portions providing a protective covering for a workman's hand, and a finger guard in the form of a solid rectangular block secured to said finger portions in a position extending transversely thereof, said block having spaced upper and lower surfaces and four finger receiving openings arranged between said surfaces and extending inwardly from an edge thereof, said finger openings facing in a direction toward said palm portion for the reception of the ends of each finger on a hand of a workman wearing said mitten, the material in said block between said upper and lower surfaces and adjacent pairs of said finger openings providing integral protective webs that resist crushing by compressive forces applied to said block.

2. A safety mitten as defined in claim 1 characterized by said protective webs operating to furnish lateral support for the wearer's fingers to prevent pinching or crushing by compressive forces against said block surfaces.

3. A safety mitten as defined in claim 1 characterized by each of said openings having a length such that at least the first joint of the workman's fingers are received therein.

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