Sept. 18, 1945. A. A. VANASSE 2,385,315

SHOULDER PAD

Filed Nov. 3, 1944

Fig. 1.

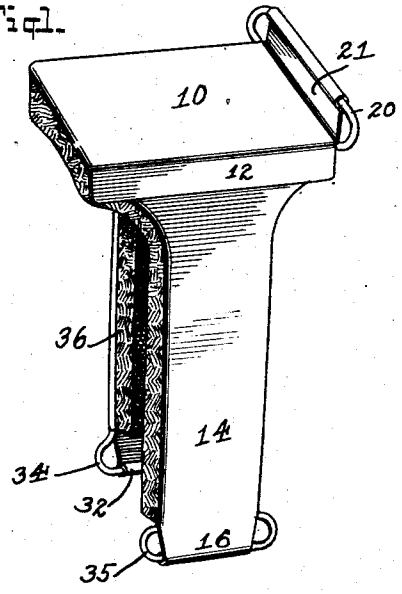


Fig. 2.

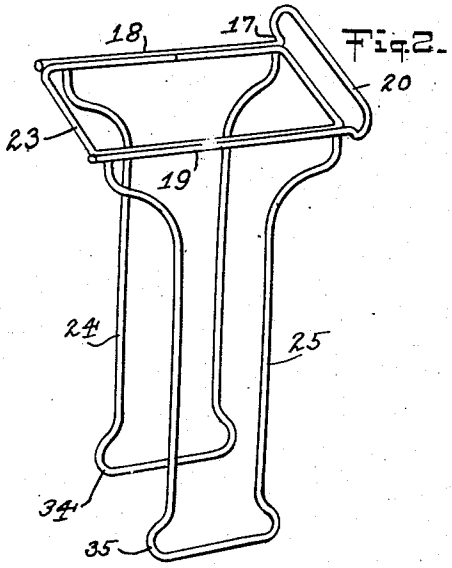


Fig. 3.

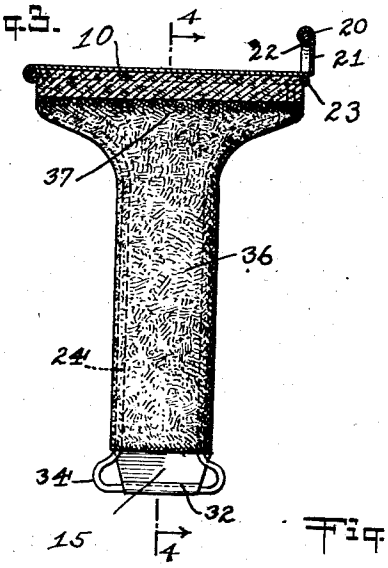


Fig. 4.

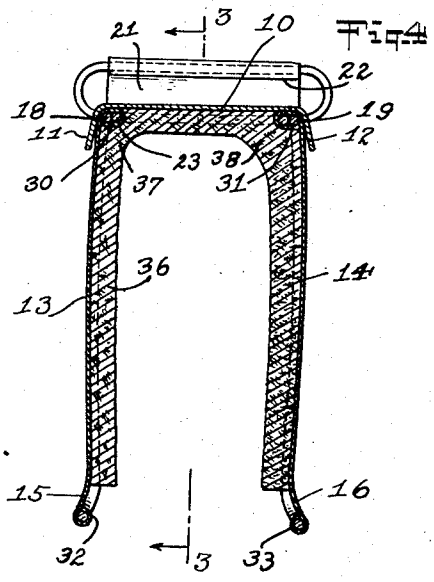
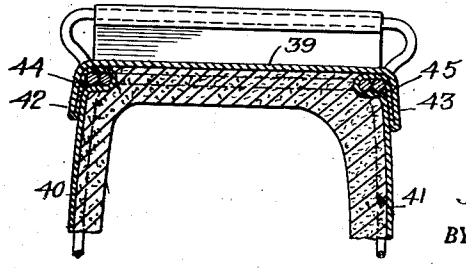


Fig. 5.



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SHOULDER PAD

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7 Claims. (Cl. 2—2)

This invention relates to protectors, and more particularly to an improved shoulder cushion pad shield for use by icemen, coalmen, hod-carriers, truckmen, stevedores, porters, furniture movers, lumbermen, stretcher bearers, garbagemen, etc.

One object of the present invention is to provide a shoulder pad of the above nature having a smooth sheet metal cover provided with an upstanding flange on the inner side of its upper surface to prevent the article being supported from sliding against the neck of the wearer.

A further object is to provide an improved shoulder pad of the above nature which will have an inverted U-shaped metallic outer frame reinforced by an interior wire skeleton frame and provided with a cushion pad lining of sponge rubber for embracing and engaging the shoulder and chest of the wearer.

A further object is to provide a device of the above nature which will be non-injurious and non-fatiguing to the wearer, simple in construction, inexpensive to manufacture, easy to install and manipulate, compact, flexible, water-repellant, ornamental in appearance, and very efficient and durable in use.

With these and other objects in view, there have been illustrated on the accompanying drawing two forms in which the invention may conveniently be embodied in practice.

In the drawing,

Fig. 1 represents a perspective view of the complete shoulder pad.

Fig. 2 is a perspective view of the interior wire skeleton frame of the shoulder pad.

Fig. 3 is a longitudinal sectional view of the shoulder pad taken at right angles to the neck-protecting flange.

Fig. 4 is a transverse sectional view, taken along the line 4—4 of Fig. 3, looking in the direction of the arrows.

Fig. 5 indicates a cross sectional view similar to Fig. 4 of a modified form of the invention in which the top plate and side plates are made from one integral sheet of material.

Referring now to the drawing in which like reference numerals denote corresponding parts throughout the several views, the numeral 10 indicates a flat top plate of sheet metal having a pair of depending short side flanges 11, 12 which permit water to drain off the top plate 10 without entering the interior of the shoulder pad.

Provision is also made of a pair of depending elongated sheet metal side flaps 13, 14 which are wide at the top, as shown in Figs. 1 and 3, and have reduced tapered bottom wings 15, 16.

In order to reinforce the shoulder pad, provision is made of a skeleton frame including a U-shaped horizontal upper wire loop 17 having horizontal side legs 18, 19 which form a support for the top plate 10, and are secured thereto as by welding or soldering.

The top wire loop 17 is provided with an upstanding loop 20 at its inner end which is adapted to be embraced by an upstanding neck flange 21 forming an integral part of the metal plate 10, as clearly shown in Fig. 1, said flange 21 having an inwardly and downwardly curled extremity 22 tightly embracing the horizontal portion of the loop 20. Provision is also made of an interior rectangular horizontal wire loop 23 welded or soldered to the side legs 18, 19 of the U-shaped wire frame 17—said loop 23 having a pair of U-shaped depending wire side wings 24, 25 welded or otherwise secured thereto at their top ends 26, 27 and 28, 29.

In order to secure the sheet metal side flaps 13, 14 to the parallel wires 18, 19 of the frame 17, the side flaps 13, 14 are provided at their upper ends with downwardly and outwardly curved sections 30, 31 which embrace said wires 18, 19 and the wire sides of the frame 23, as clearly shown in Fig. 4.

The bottom wings 15, 16 are provided with lower extremities 32, 33 which are curled inwardly around the horizontal bottom ends of the wire loops 24, 25, as shown.

In order to form two pairs of open eye sections for the reception of shoulder-attaching straps (not shown), the wire side wings 24, 25 have widened bottom sections 34, 35, as shown in Figs. 1 to 3.

For protecting the chest of the wearer from injury by articles supported on the shoulder pad, provision is made of a U-shaped cushion pad 36 of sponge rubber or other similar material, which is adapted to be cemented or otherwise secured to the interior of the skeleton wire frame and the outer metal plates previously described. The sponge rubber pad 36 is provided with thickened interior corners 37, 38 which serve to make the shoulder pad more comfortable and cause it to fit smoothly over the shoulder of the user.

Operation

In operation, when it is desired to support a cake of ice or other article upon the shoulder pad, said article will be supported on the horizontal plate 10 and will preferably be pushed inwardly

until it engages the vertical flange 21, which will prevent the article from striking the neck of the user. The article may be held manually in this position as long as desired.

The bottom sheet metal wings 15, 16 are preferably bent outwardly to facilitate the placing of the pad upon the shoulder of the user.

In the modified form of the invention shown in Fig. 5, provision is made of a top sheet metal cover plate 39 and a pair of side sheet metal flaps 40, 41 which are integral with each other and are connected by depending side flanges 42, 43 which are formed of double thickness by bending said sheet metal as shown. In this form, the wire frames 17 and 23 are embraced by the sockets 44, 45 at the joints between the double thickness flanges 42, 43 and the depending wings 40, 41. This provides a strong reinforced construction.

While there have been disclosed in this specification two forms in which the invention may conveniently be embodied, it is to be understood that these forms are shown for the purpose of illustration only, and that the invention is not to be limited to the specific disclosures, but may be modified and embodied in various other forms. In short, the invention includes all the modifications and embodiments coming within the scope of the following claims.

Having thus fully described the invention, what is claimed as new, and for which it is desired to secure Letters Patent, is:

1. In a weight-supporting protective shoulder pad, an interior U-shaped skeleton wire frame having a rectangular top section and a pair of depending rectangular side wings, a U-shaped cushion padding located within said wire frame, and an exterior U-shaped sheet metal cover located outside of said wire frame.

2. The invention as defined in claim 1, in which said exterior metal cover is secured to said skeleton wire frame by welding.

3. The invention as set forth in claim 1, in which the top of said sheet metal cover is provided with an upstanding inner flange to protect the neck of the user.

4. The invention as set forth in claim 1, in which said skeleton wire frame is provided with open enlarged eye sections at the bottom thereof for receiving shoulder-attaching straps.

5. The invention as set forth in claim 1, in which said skeleton frame and sheet metal cover are made wide at the top to cover the entire length of the shoulder and of reduced width at the lower portions thereof shaped to fit about the chest of the wearer.

6. The invention as set forth in claim 1, in which the side depending wings are outwardly flared at the bottom thereof to facilitate the placing of the shoulder pad over the shoulder of the user.

7. In a weight-supporting protective shoulder pad, an interior U-shaped skeleton wire frame having a rectangular open top section and a pair of vertical depending open side wings, and an exterior U-shaped sheet metal cover embracing said frame, the sides of said cover being reversely looped to form corner sockets for the sides of said frames to reinforce the strength thereof.

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