April 9, 1929. K. E. JENSEN 1,708,271

LEGGING

Filed Aug. 6, 1927

Fig. 1.

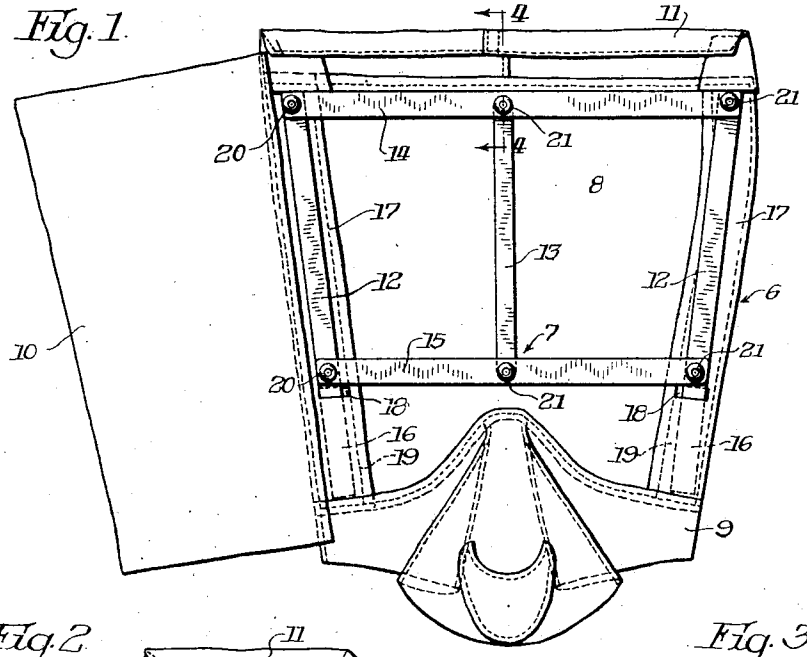


Fig. 2.

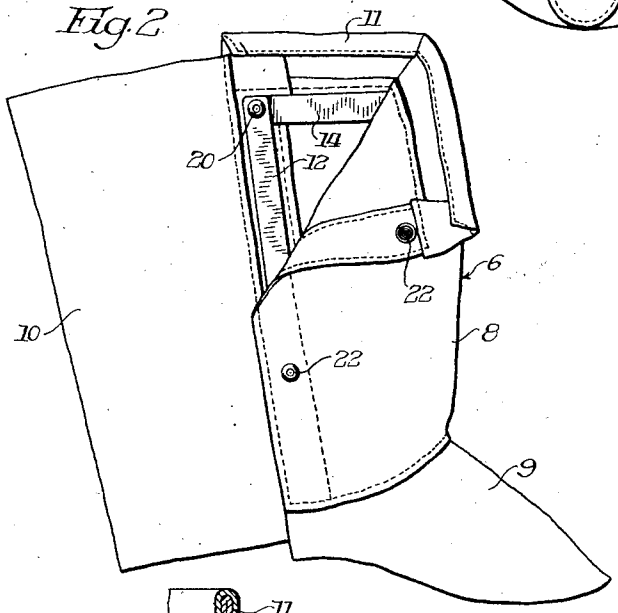


Fig. 3.

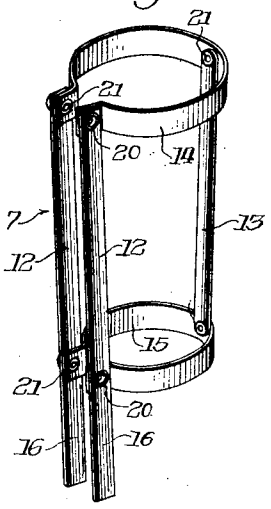
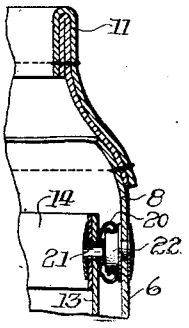


Fig. 4



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UNITED STATES PATENT OFFICE.

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LEGGING.

Application filed August 6, 1927. Serial No. 211,021.

The invention relates generally to a legging and more particularly to a legging adapted for use by workmen in industries in which flying particles of molten metal or the like create a need for leg protection.

An object of the invention is to provide a new and improved legging adapted to protect the leg and foot of the wearer.

Another object is to provide a legging in which a protecting covering may be removed from a supporting means for repair or replacement thereof.

A further object is to provide a legging which may be manufactured at a low cost and in which parts thereof may be interchanged, replaced, or easily removed for repairs.

Other objects and advantages of the invention will become apparent in the following detailed description when taken in connection with the accompanying drawings in which:

Figure 1 is an expanded plan view of the inner side of the preferred form of the invention.

Fig. 2 is a side elevation of the legging having one part thereof folded over to show the manner in which the parts of the legging are assembled.

Fig. 3 is a perspective view of the frame upon which a protective covering is mounted.

Fig. 4 is a section taken along the line 4—4 of Fig. 1 looking in the direction of the arrows.

In the preferred embodiment disclosed herein, the legging comprises a suitably formed flexible leg protecting covering 6 which may be freely rolled or folded. To support such a legging upon a wearer's leg a detachable means 7 is adapted to provide rigidity and unyielding support to the covering in one direction and is resiliently movable in the other direction. Thus a means is provided which is resilient to permit the legging to be readily slipped on or removed from the leg of a wearer but which provides the necessary support to hold the covering in proper position.

As shown in the drawing, the legging comprises an upper or body section 8 and a lower section or flare 9 suitably secured together as by stitching. Preferably both are of leather or similar flexible substantially impervious material which may be readily worked and yet will provide a high degree of protection against flying particles of molten metal or the like. A closing flap or tab 10 may be provided at one side of the body section 8 of the legging which flap may be folded over to close the gap in the rear of the legging when the legging is in place. The flare 9 is arranged to overlie and protect the wearer's foot and the upper part of the body section may be drawn inwardly in any preferred manner as at 11 in order to insure that the upper part of the legging will closely hug the wearer's leg.

In the present embodiment, the detachable resilient means 7 comprises a metal frame shaped to conform to the leg of the wearer and which is arranged to be detachably secured to the body section of the legging, thereby providing a support for the legging by which the legging may be readily secured in proper position about the user's leg. As may be seen in Fig. 3, the frame preferably comprises a pair of vertical side stays 12, a shorter centrally positioned stay 13 and two substantially U-shaped spring steel clips 14, 15 all of which are rigidly secured together with one clip 14 positioned transversely of the stays at their upper end and with the other clip 15 extending transversely of the frame at the lower end of the shorter stay 13. Since the vertical side stays 12 are longer than the central stay 13, this construction provides a pair of downwardly extending portions or legs 16 for a purpose to be presently described. The proportions of the frame are such that the lower clip will be positioned a substantial distance above the ankle of the wearer of the legging.

In this type of legging it frequently becomes desirable to remove the outer protecting cover from the metal frame for repair or replacement. To this end, the legging and the metal frame are separable units which are adapted to be readily assembled or taken apart. As herein shown, the side edges of the body section 8 are provided with reinforcing strips 17 sewed thereon. The strips 17 are slotted, as at 18, and, with the body section, provide an elongated pocket 19 at each side and near the lower end of the body section. These pockets 19 are adapted to receive the extending portions or legs 16 on the metal frame 7 to provide an engagement between the legging and the lower end of the frame which will hold the flexible covering snugly against the user's leg at a point about the ankle without interfering with the freedom of movement of the ankle.

In the present instance, means are provided which serve the dual function of securing the clips 14, 15 to the vertical stays 12, 13 and of mounting thereon one part of a means by which the covering 6 and the frame 7 are detachably secured together. As shown in Fig. 4, one part 20 of a snap fastener, in this case the female member, is secured at each intersection of the clips and stays. Preferably this member is secured thereon by means of a headed shank 21 which extends through registering apertures in the stay and the clip to secure the clip, the stay and the female member rigidly together. Male members 22 are suitably mounted upon the covering 8 in appropriate positions and are adapted to engage the female members 20 on the metal frame thereby detachably securing the covering to the frame. In this manner an attachment between the metal frame and the flexible leg covering has been provided which permits the spring frame to hold and clamp the protecting covering closely about the user's leg.

From the foregoing description, it will be apparent that a legging has been provided which may be readily slipped on or removed by merely spreading the side stays of the metal frame apart. Moreover, a legging has been provided in which it is only necessary to disengage the snap fasteners and to slip the legs from the pockets to remove the metal frame from the protecting cover in order to replace or repair either part. Furthermore a legging has been provided which may be used with great ease and facility, which may be cheaply manufactured and which serves as a complete and adequate protection for the wearer's leg.

I claim as my invention:

1. A legging having, in combination, a flexible leg protecting covering, a metal frame shaped to fit a wearer's leg, said frame comprising a pair of longitudinal side stays, a shorter central stay, and a plurality of spring clips spaced one above the other transversely of said stays, female members of a fastening means mounted at the intersections of the stays and the clips, a single fastening means at each intersection arranged to secure the stays, clips and the female members rigidly together, complementary male members of the fastening means disposed about the inner surface of said leg protecting covering and arranged to engage said female members detachably to secure said leg covering to said metal frame, said side members of said frame extending below the lowermost of said clips, and pockets in said flexible covering adapted to receive said projecting portions of said frame.

2. A legging having, in combination, a metal frame shaped to fit a wearer's leg, comprising a pair of vertically spaced spring clips and a plurality of connecting stays rigidly secured thereto, certain of said connecting stays being arranged to extend beyond the lowermost of said spring clips to provide projections thereon, a flexible leg protecting covering having elongated pockets therein positioned to receive the projections on said frame, said flexible covering and said frame having complementary snap means appropriately mounted on said frame and said flexible covering whereby when said projections have been inserted in said pockets the covering may be secured to the frame.

3. A legging having, in combination, a pliant leg protecting covering, a metal frame shaped to fit a wearer's leg, said frame comprising a plurality of vertically spaced spring clips and a plurality of connecting stays rigidly secured thereto, securing means mounted on said metal frame, and complementary securing means on said covering arranged to be detachably engaged with said first mentioned securing means whereby said covering may be detachably secured to the frame.

4. A legging comprising, in combination, a flexible leg protecting covering having pockets therein, a resilient metal frame shaped to fit a wearer's leg having projections thereon arranged to be received in said pockets in the covering, and complementary snap fastening means secured to said covering and said frame for detachably securing one to the other.

5. A legging having, in combination, a flexible covering and a frame adapted to support said covering in position on the wearer's leg, said frame comprising a pair of spring clips, a plurality of side stays, means for securing said clips and side stays rigidly together, and complementary fastening means for detachably securing the frame and the cover together, one part of said fastening means being held on said frame by said securing means.

6. A legging comprising, in combination, a flexible leg protecting covering, means shaped to fit a wearer's leg and adapted to support said flexible covering upon the leg, said means having projections thereon adapted loosely to engage the flexible covering, and means providing a detachable engagement between said covering and said supporting means.

7. A legging having, in combination, a flexible covering, a metal frame shaped to fit a wearer's leg, a plurality of projections rigid with said metal frame, said flexible covering having a plurality of pockets therein each adapted to receive one of said projections, and means providing a detachable engagement between the flexible covering and the frame.

8. A legging having, in combination, a flexible covering, a metal frame having parts thereof loosely engaging appropriately formed parts of the covering, and a plurality of complementary snap members mounted

on said frame and said covering for positively securing one to the other.

9. A legging comprising, in combination, a flexible leg protecting covering and a separate unitary frame detachably secured thereto, said frame being adapted to yieldingly engage the leg of a wearer to support said covering in position thereon.

10. A legging comprising, in combination, a pliant leg protecting covering and means detachably secured thereto affording rigid support for said covering, and detachable therefrom as a unit.

In testimony whereof, I have hereunto affixed my signature.

KARL E. JENSEN.