April 9, 1929. K. E. JENSEN 1,708,272

LEGGING

Filed Oct. 13, 1927

Fig. 1.

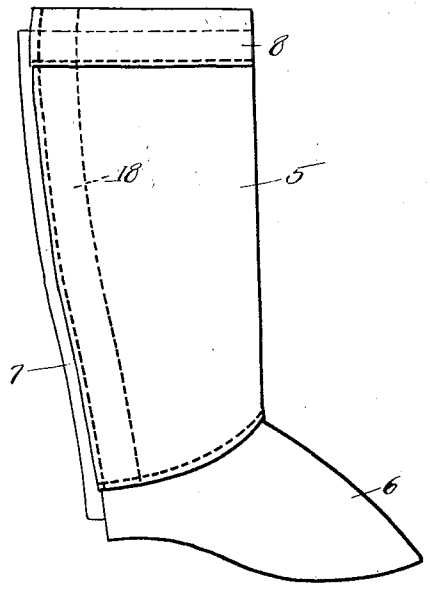


Fig. 2.

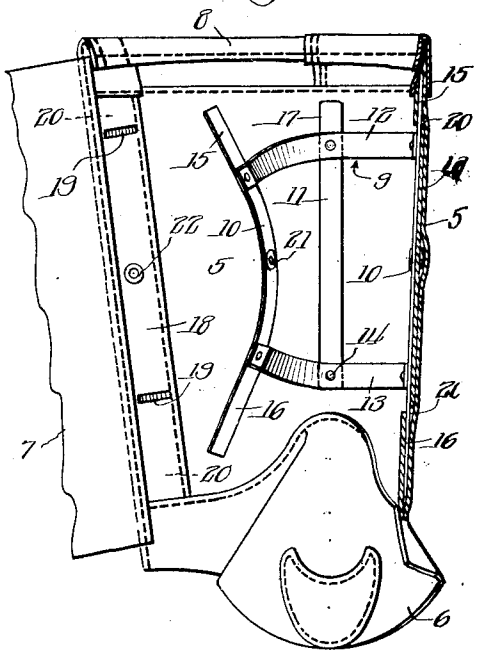


Fig. 3.

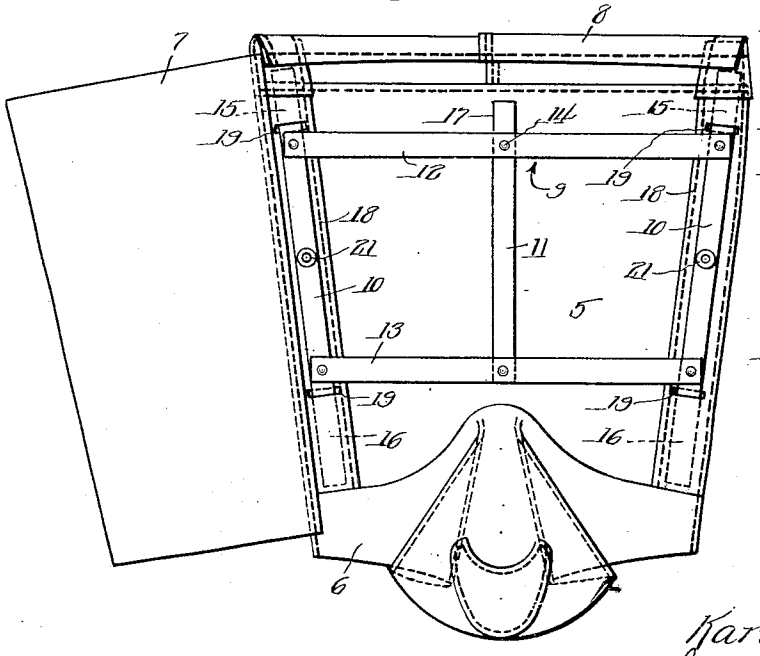
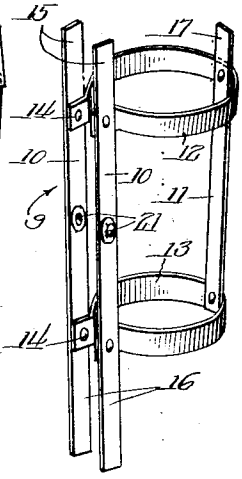


Fig. 4.



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UNITED STATES PATENT OFFICE.

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LEGGING.

Application filed October 13, 1927. Serial No. 225,886.

The invention relates generally to a legging and more particularly to an industrial legging especially adapted for use as a protection against flying particles of molten metal or the like.

The object of the invention is to provide a new and improved legging adapted to protect the foot and leg of the wearer; which legging comprises two separable parts adapted for ready assembly or disassembly in a novel manner.

A further object of the invention is to provide a legging of this character which may be cheaply manufactured and is particularly adapted to permit repair or replacement of the parts thereof.

Other objects and advantages of this invention will become apparent in the following detailed description and from the accompanying drawings in which,

Figure 1 is a side elevation of the preferred form of the invention.

Fig. 2 is a view of the legging partially expanded and partially in section, showing the manner in which parts of the legging are assembled.

Fig. 3 is an expanded view of the inner side of the legging.

Fig. 4 is a perspective view of the frame upon which a protective covering is mounted.

In the preferred embodiment of the invention disclosed herein the legging comprises a properly formed flexible leg protecting covering which is arranged to be supported upon a wearer's leg by means of a resilient frame capable of being readily detached or attached to the protecting covering.

As shown in the drawings one part of the legging comprises a flexible leg protecting covering in which an upper or body section 5 and the lower section or flare 6 are suitably secured together as by stitching. Preferably both are of leather or a similar flexible, substantially impervious material which may be readily worked and yet will provide a nearly perfect protection against flying particles of molten metal or the like.

If desired a closing flap or tab 7 may be provided at one side of the body section of the legging which flap is adapted to be folded over to close the gap at the rear of the legging when the legging is in place. The flare 6 is adapted to overlie and protect the wearer's foot and the other part of the body section may be formed in any suitable manner, as at 8, to insure that the upper part of the legging will closely hug the wearer's leg.

The leg protecting covering thus far described is substantially the same as that described and illustrated in my co-pending application, Serial No. 211,021, filed August 6th, 1927, and is adapted to be supported in place upon a wearer's leg by such means as a frame designated generally as 9 preferably formed of some material, as metal, which will provide a substantially rigid support for the flexible covering. Preferably the frame is formed normally to have the shape of the leg of the wearer and is capable of being expanded so that when placed about the leg of the wearer it will yieldingly engage the leg to maintain the covering, supported thereby, in position.

To this end, as shown in Fig. 4, the frame comprises a pair of vertical side stays 10, a shorter central stay 11 and two substantially U-shaped spring clips 12, 13 all secured together in a suitable manner as by the rivets 14. One of the spring clips, herein shown as the clip 12, is positioned transversely of the stays near the upper end of the central stay 11 with the other clip 13 also positioned transversely of the frame at approximately the lower end of the central stay. Thus the side stays may be spread apart against the force of the spring clips, to open the frame.

In order that the protecting covering or the frame may be easily repaired or may be entirely replaced, when necessary, it is desirable that a simple means be provided which permits the frame and the covering to be readily separated. To this end a detachable engagement is provided between the frame and the protecting covering. In the present instance the vertical side stays 10 are longer than the central stay which construction provides a pair of projections or legs 15 extending upwardly beyond the upper spring clip 12 and a slightly longer pair of projections or legs 16 extending downwardly below the lower spring clip. The central stay may project upwardly beyond the clip 12, as at 17 to serve as a partial support for the covering 5 when it is mounted on the frame. Means are provided upon the covering which means are adapted to be engaged by the projecting pairs of legs 15, and 16 upon the frame in order to secure the legging to the frame. It is contemplated that these leg engaging means may be of any suitable form such as loops or the

like, but in the present instance an integral part of the leg protecting covering is constructed to provide the leg engaging means.

As many be seen in Fig. 3 the side edges of the body section 5 are reinforced with elongated side strips 18 sewed thereon. At appropriate positions near the upper and lower ends of the strips longitudinal slots 19 are provided therein. Thus what may be termed an elongated pocket 20 is provided between the strips 18 and the protecting covering 5 near each of the four corners of the covering, and each of these pockets are adapted to receive one of the projecting legs on the frame.

While it is possible that the material from which the leg protecting covering is constructed may be sufficiently pliable and elastic to permit the covering to be stretched over the projecting legs on the frame such a method is apt to result in a torn or damaged covering. It has been found desirable, therefore, to form the side stays 10 of a resilient material, such as spring steel, in order that the stays may be bowed, as shown in Fig. 2, to permit the insertion of the projecting legs 15, 16 into the pockets 20. As an additional means for securing the covering to the frame one part of a snap fastener 21 may be mounted upon each of the side stays intermediate the ends thereof with the complementary part 22 of the fastener secured upon the protecting covering in such position as to be engaged by the part 21 upon the stay.

In the assembling operation it is only necessary to insert the longer lower legs 16 into the proper engaging means or pockets 20 on the covering and to spring the stays 10 to permit the insertion of the upper legs 15 into their respective engagements with the covering. The disassembly of the two parts is, of course, equally as simple.

From the foregoing description it will be apparent that a legging has been provided in which the supporting means for holding the legging about a wearer's leg may be easily attached or detached from the legging, which supporting means cannot be accidentally removed or loosened from the covering.

While the invention is susceptible of various modifications and alternative constructions, I have shown in the drawings and have described in detail the preferred embodiment, but it is to be understood that I do not thereby intend to limit the invention to the specific form disclosed, but intend to cover all modifications and alternative constructions falling within the spirit and scope of the invention as expressed in the appended claims.

I claim as my invention:

1. A legging having, in combination, a metallic frame shaped to fit a wearer's leg 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 and spaced from the ends of said side stays to provide projecting portions extending beyond said spring clips, and a flexible leg protecting covering adapted to be supported upon a wearer's leg by said metal frame, said covering including a pair of reinforcing side strips having a plurality of slots therein adapted to receive the projecting ends of said side stays, said stays being flexible to permit bowing thereof whereby the ends of said stays may be inserted in said slots.

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 pair of resilient connecting stays rigidly secured thereto and projecting beyond each of said clips, and a leg protecting covering adapted to be supported upon a wearer's leg by said frame, said covering having means thereon adapted to be engaged by projecting ends of said side stays to secure the covering on the frame.

3. A legging having, in combination, a 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 secured thereto and spacing said clips vertically apart, and a plurality of legs projecting in opposite directions from said frame, said flexible covering having means thereon adapted to be engaged by said legs to secure the covering to the frame.

4. A legging having, in combination, a flexible leg protecting covering and a frame shaped to fit a wearer's leg and adapted to support said covering in position on the wearer's leg, said frame including a pair of resilient stays arranged normally to provide a longitudinal support for said flexible covering, and means on said covering adapted to be engaged by each of said stays to secure the covering to the frame, said stays being resilient to permit bowing thereof to engage said stays with the means on said covering.

5. A legging having, in combination, a flexible leg protecting covering and a frame shaped to fit a wearer's leg and adapted to support said covering in position on a wearer's leg, said frame including a pair of stays arranged normally to provide a longitudinal support for said flexible covering, and means on said covering arranged to receive the ends of each of said stays, said means being spaced longitudinally apart a distance less than the length of said stays, said stays being resilient to permit the ends thereof to be flexed into engagement with said means detachably to secure the covering and the frame together.

In testimony whereof, I have hereunto affixed my signature.

KARL E. JENSEN.