(No Model.)

O. VAN OOSTRUM.

WATERPROOF SUIT.

No. 507,466. Patented Oct. 24, 1893.

Fig. 1

Fig. 4

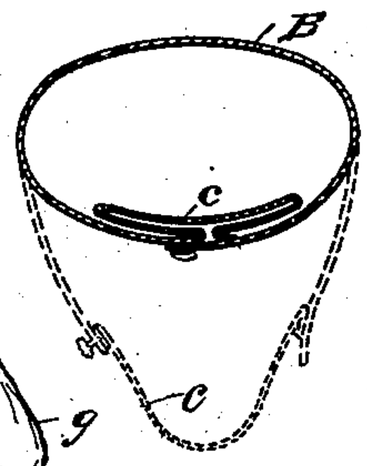


Fig. 5

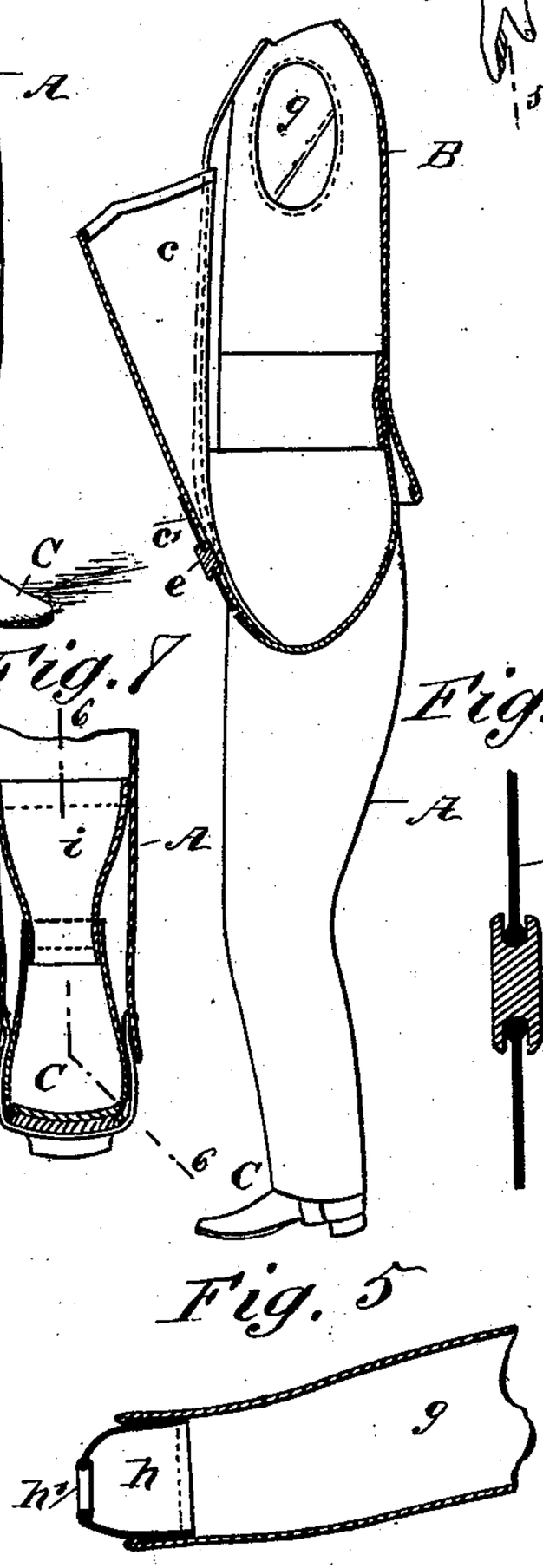


Fig. 2

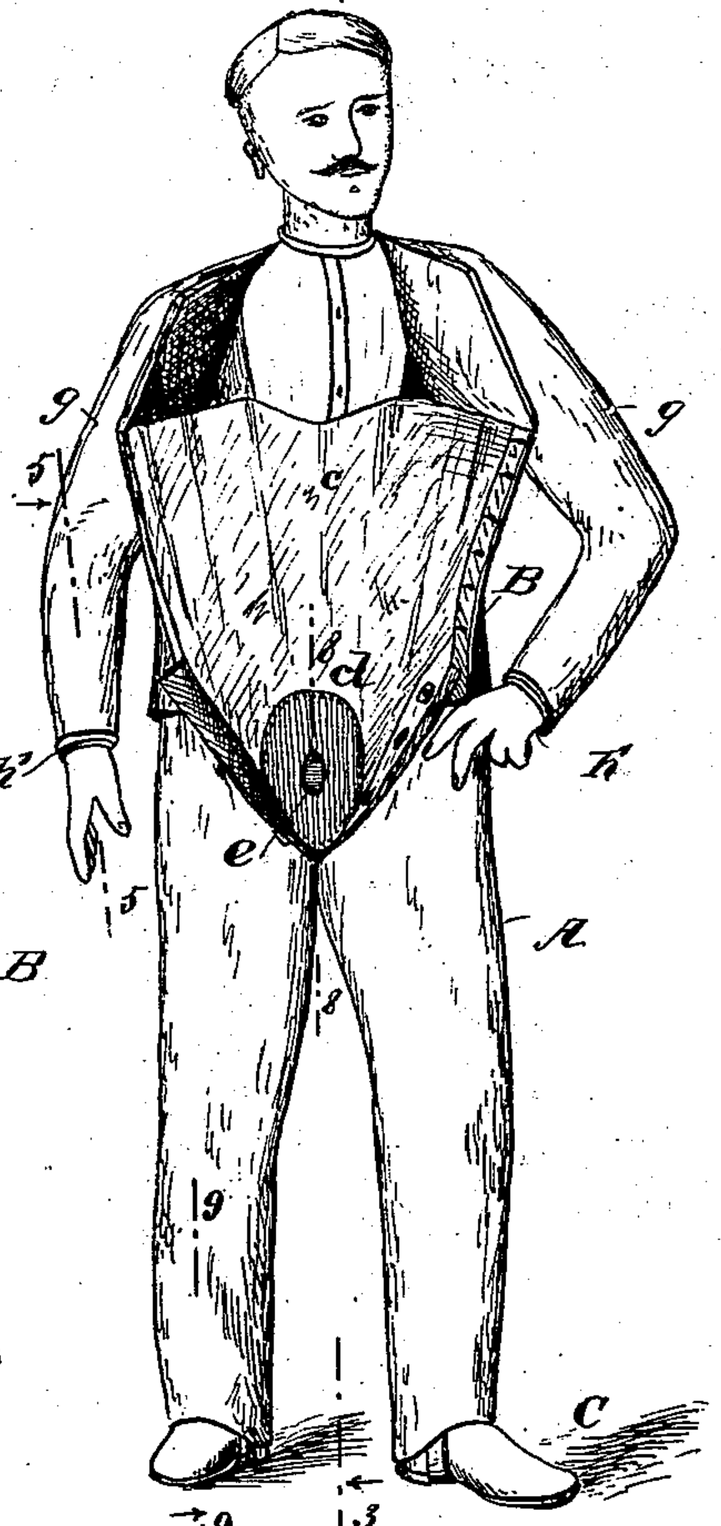


Fig. 6

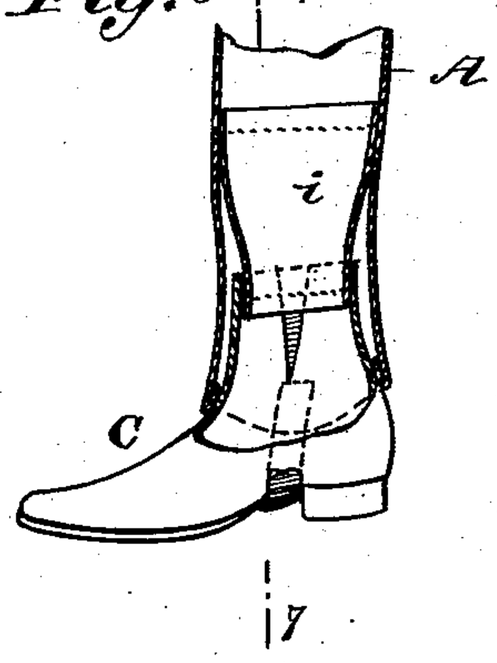


Fig. 7

Fig. 8

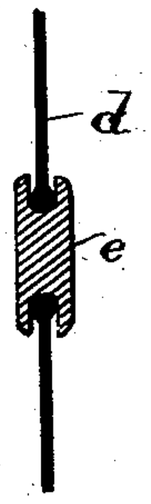
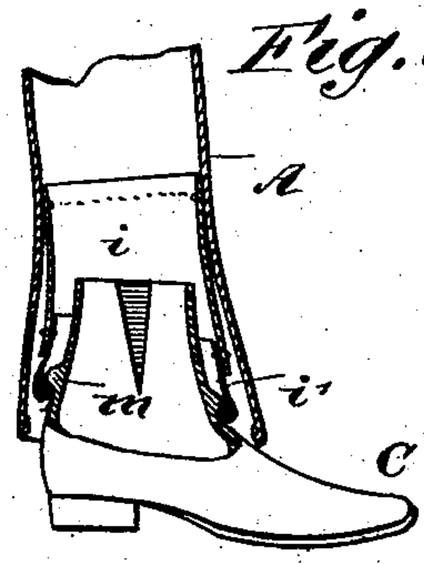


Fig. 9



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WATERPROOF SUIT.

SPECIFICATION forming part of Letters Patent No. 507,466, dated October 24, 1893.

Application filed April 14, 1893. Serial No. 470,287. (No model.)

To all whom it may concern:

Be it known that I, OTTE VAN OOSTRUM, of Portland, in the county of Multnomah and State of Oregon, have invented new and useful Improvements in Waterproof Garments, of which the following is a full, clear, and exact description.

This invention relates to improvements in waterproof garments for men or boys, and has for its objects, to provide a novel suit of external clothing for males, which will be waterproof, and that from its peculiar formation will be adapted for easy donning and a sealed connection with shoes or boots that are detachable, and a like attachment upon the wrists of the wearer.

The invention also comprises convenient means for compliance with the calls of nature, and a sealing appliance for the provided aperture, and further consists in the peculiar construction and combination of parts, as is hereinafter described and claimed.

Reference is to be had to the accompanying drawings forming a part of this specification, in which similar letters of reference indicate corresponding parts in all the figures.

Figure 1 is a front view of the suit of clothing as it appears in use. Fig. 2 is a front view of the suit of clothing applied to use, the upper portion being adjusted to disclose inner portions embodying features of the invention. Fig. 3 is a vertical section of the garment, on line 3—3 in Fig. 2. Fig. 4 is a sectional plan view of the improvement, on the line 4—4 in Fig. 1. Fig. 5 is an enlarged sectional view in part, of a sleeve of the improved waterproof garment, on the line 5—5 in Fig. 2. Fig. 6 is a vertical sectional side view of part of one leg of the improved garment and an attached shoe, broken away above, the section being taken on the line 6—6 in Fig. 7, and showing one method for connecting these parts neatly and in a waterproof manner. Fig. 7 is a vertical sectional view in part, of the garment leg and an attached shoe, shown in Fig. 6, the section being taken on the line 7—7 in said figure. Fig. 8 is an enlarged transverse sectional view of details of construction, comprising a portion of the improvement, the section being taken on the line 8—8 in Fig. 2; and Fig. 9 is a vertical sectional view of the lower portion and side of one leg of the improved garment, on the line 9—9 in Fig. 2.

The suit of external clothing shown, and which embodies the novel features of improvement, is mainly manufactured from waterproof goods, by preference that is known as mackintosh cloth, but other textile fabric which is pliable, of a neat exterior finish, and is rendered waterproof by any suitable means, may be utilized if desired.

The major portions of the improved waterproof garment, consist of the trousers A, that incase the lower limbs of the wearer, and a blouse or jacket B, that serves to neatly envelop the upper part of the body and arms when donned by the person to whom the garment has been fitted. The parts A, B, are made shapely, and the seams sewed or otherwise joined tightly, so as to exclude the elements at these points, pockets *a*, being supplied for the garment, which pockets are of waterproof goods, and are located on it at the usual points, as indicated in Fig. 1.

The jacket B, is joined to the waistband of the trousers A, at a suitable point above the lower edge of the part B, in a water-proof manner, so as to afford a loose pendent flap for the jacket, which gives it a more conventional appearance, this feature of construction appearing in Fig. 3. The jacket and trousers are each furnished with the usual front opening, in appearance, and the jacket front flaps and the flies of the lower garment are finished to simulate the construction of separate garments of their class, buttons and buttonholes being provided to afford means for joining the overlapped edges of both main portions A, B, of the complete garment. There is a proper opening provided at the upper part of the jacket, when connected to the trousers portion, to adapt this part to fit neatly around the neck of the wearer when the jacket is buttoned up, as shown in Fig. 1.

When the garment is in an unbuttoned condition, as represented in Fig. 2, an important feature of the improvement is displayed, which, as shown clearly in Figs. 2, 3 and 4, consists essentially of a waterproof, thin, strong, folding fibrous partition or lining *c*, which has its side edges secured with a waterproof joint to the inner surface of the heavier jacket material. The relative dimensions of

the lining *c*, permit it to be bulged out forwardly, and as its lower portion extends to the crotch of the trousers A, and is secured at the side edges to the inner surface of said portion of the garment, it will be seen that ample room is afforded at the upper opening of the jacket, for the easy donning of the entire suit, by first introducing the feet and lower limbs through the space mentioned, and which is plainly indicated in Figs. 3 and 4.

At a proper point for convenience in use, there is a more elastic fabric *d*, secured upon the lower part of the lining or partition *c*, which part *d*, constitutes a diaphragm that is apertured of a proper size for an obvious purpose. Said orifice is normally closed with a peripherally grooved oval disk *e*, formed of any proper rigid material, the relative size of the disk considered diametrically, requiring the material of the diaphragm to be stretched for its insertion, the subsequent contraction of the edge of the hole in the diaphragm serving to retain the disk from accidental displacement, while a quick removal is permissible when occasion requires, the contraction of the elastic diaphragm upon the grooved edge of the rigid disk rendering the joint between said parts water-tight.

When the garment has been drawn upwardly upon the lower limbs and body, the wearer inserts his arms through the sleeves *g*, that are furnished at their open free ends with elastic inner cuffs *h*, that are each contracted at the outer end so as to produce an opening which will be small enough to require the material to stretch when the wrist of the wearer is within said cuff, the margin of the wristband being protected by an elastic piping band *h'*, which insures strength and affords a neat finish thereto.

The lower end portions of the trousers legs may be permanently secured to the shoes or boots worn on the feet of the partly incased with the waterproof garment A, B, as indicated in Fig. 6, or preferably have a separate connection therewith, as shown in Fig. 9. The means for removably connecting the shoes C, with the legs of the trousers A, consists of two similar inner tubular attachments *i*, that are fitted one within each leg, and thereto attached by the upper edge of the parts *i*, that for convenience are designated junction pieces. On the free lower edge of each junction piece *i*, a more elastic annular piece *i'* is secured, so as to depend therefrom, there being a piping rib formed on the lower edge of each part *i'*.

The shoes, or if preferred, the boots worn by the wearer of the improved waterproof garment, have each a similar encircling rib *m*, formed thereon, which from their position on the upper part of the foot covering are adapted to receive the ribs on the elastic pieces *i'*, that are of such a relative diameter in the rings they form, as to require to be stretched when applied to the ribs *m*, so that they may pass over or against the latter, and embrace the ankle covering of the shoe or boot, thus effecting a water tight joint between these engaged parts, the attachment and removal being easily and quickly effected.

It will be seen, that if the provision for an attachment of the junction pieces *i*, is provided as represented in Fig. 9, the lower parts of the trousers legs will hang in the usual manner over the shoe, and present a neat appearance, a water-tight joint being at the same time produced by the concealed parts that have been described.

When the shoes are to be permanently attached to the junction pieces *i*, these parts are sewed or otherwise attached at their lower edges around the upper parts of the shoes, as shown in Figs. 6 and 7, the elastic extensions *i'* being then dispensed with.

When the waterproof garment has been donned, and is in the condition represented in Fig. 2, the surplus material of the waterproof lining *c*, is lap-folded, as indicated in Fig. 4, which will permit the jacket B, to be buttoned, and the trousers also, the complete garment then appearing as shown in Fig. 1.

If found desirable, any preferred form of ventilators may be applied under the arms of the jacket.

Having thus described my invention, I claim as new and desire to secure by Letters Patent—

1. A water proof garment comprising trousers having flies provided with suitable fastenings, a jacket open in front, and provided at said opening, at the inside, with a folding and laterally extensible lining secured by its edges to the inner surface of the jacket, substantially as described.

2. A water proof garment comprising trousers and jacket, the latter formed with a front opening and provided with a laterally extensible lining at such opening, said lining being continued to form a depending flap which extends within the trousers and is secured thereto, substantially as described.

3. In a waterproof garment, the trousers, the jacket joined to the trousers, and both open in front, the folding and laterally-extensible lining within, and the removable disk in an aperture formed in an elastic diaphragm attached upon the lower portion of the lining, substantially as described.

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Witnesses:
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