No. 869,177. PATENTED OCT. 22, 1907.

B. C. HATHAWAY.

WATERPROOF GARMENT.

APPLICATION FILED JUNE 18, 1906.

Fig. 1.

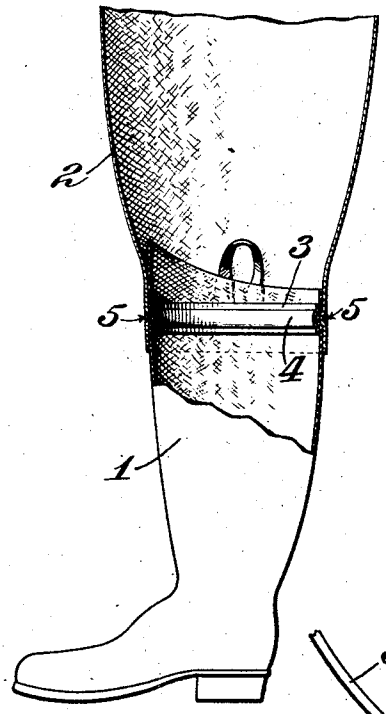


Fig. 2.

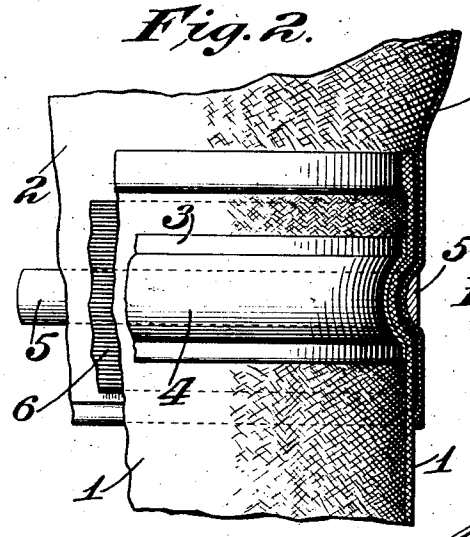


Fig. 7.



Fig. 8.

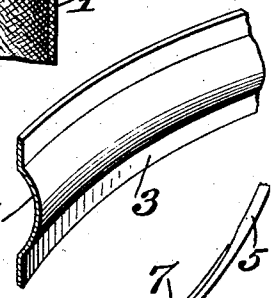


Fig. 3.



Fig. 5.

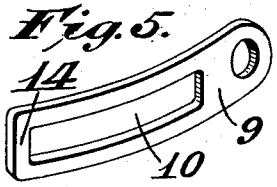


Fig. 4.

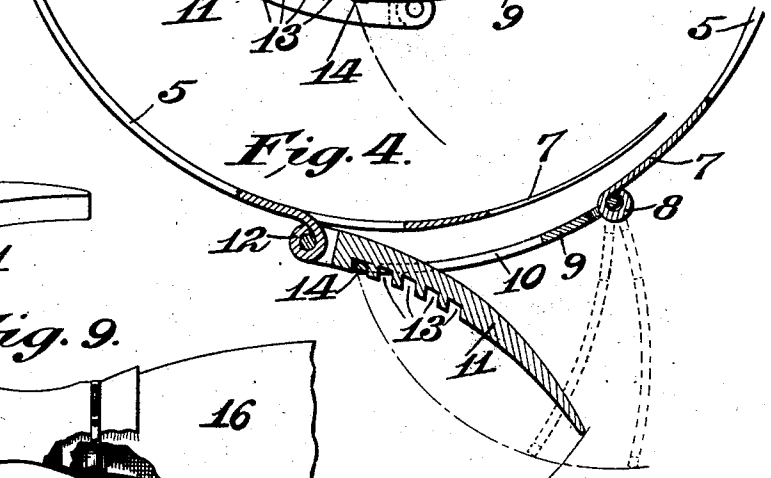


Fig. 6.

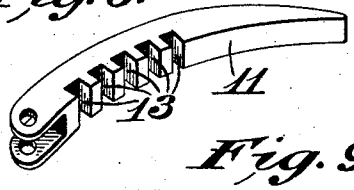


Fig. 9.



Witnesses:

G. A. Pennington

J. B. Megown.

Inventor:

Bruce C. Hathaway

By Cameron & Cameron

Attys.

UNITED STATES PATENT OFFICE.

BRUCE C. HATHAWAY, OF BOULDER, ILLINOIS.

WATERPROOF GARMENT.

No. 869,177. Specification of Letters Patent. Patented Oct. 22, 1907.

Application filed June 18, 1906. Serial No. 322,182.

To all whom it may concern:

Be it known that I, BRUCE C. HATHAWAY, a citizen of the United States, and a resident of Boulder, county of Clinton, and State of Illinois, have invented a new and useful Improvement in Waterproof Garments, of which the following is a specification.

This invention relates to waterproof apparel and has for its principal objects to produce a waterproof union garment comprising separable parts each of which constitutes an article of apparel in itself; to provide a water-tight connection between said separable parts which can be readily effected; and to attain certain advantages hereinafter more fully appearing.

The invention consists in the parts and in the arrangements and combinations of parts hereinafter described and claimed.

In the accompanying drawings which form a part of this specification, and wherein like symbols refer to like parts wherever they occur, Figure 1 is a side view, partly in section, showing an embodiment of my invention wherein the leg portion of a waterproof "hip-top" is separably connected to the upper portion of a gum boot; Fig. 2 is an enlarged fragmentary sectional view showing the manner of making the water-tight connection between separable parts; Fig. 3 is a detail view of a portion of a clamping band showing the securing elements in locked position; Fig. 4 is a similar view showing the securing elements in ineffective position; Fig. 5 is a perspective view of the slotted link which cooperates with the locking lever; Fig. 6 is a perspective view of the locking lever; Fig. 7 is a perspective view of a portion of the clamping band showing the preferred cross section of said band; Fig. 8 is a perspective view showing the cross-section of the supporting ring; and, Fig. 9 is a view showing an embodiment of my invention wherein a glove is separably connected to a sleeve of a garment.

The invention comprehends either nether garments, body garments, or a full union suit. Thus a knee-length boot can be provided with a separable "hip-top" or may be attached to the leg of a pair of trousers; a glove can be provided with a separable sleeve top or attached to the sleeve of a body garment; or, if desired, a full union suit of separable garments can be produced, and the several garments can be joined with water-tight connections.

In the drawings are shown only portions of a complete garment and detailed illustrations of the connecting device, but it is obvious that the connection can be applied at several places in a complete garment.

For the purpose of illustration, a representation of a gum boot 1 is shown in the drawings. To the top of the boot is connected the bottom of the leg portion of a separable waterproof "hip top" 2, or, in lieu of an ordinary hip top a pair of trousers. A supporting ring 3 is placed inside of the boot top. This ring 3 is formed with an annular concavity or depression 4. The annular depressed portion forms a seat for a clamping band 5 and the portions of the garment adapted to be compressed therebetween, and also adds rigidity to the structure. It is preferable, although not necessary, to insert an elastic band 6 between the parts to be connected, as shown in Fig. 2. This is especially desirable when the inner lining of the outer part 2 is of canvas, and in the absence of a wide inturned hem of the outer coating of rubber.

The clamping band 5 comprises a split ring, preferably of a cross-section as shown in Fig. 7, with its inner face rounded to conform to the contour of the concavity 4 in the supporting ring 3. The ends of the split clamping band 5 are reduced in thickness as at 7 and are adapted to overlap when the band is applied. One of the end portions 7 is formed into an eye or loop 8 to which is loosely connected a link 9. The link 9 is formed with an elongated slot 10 through which a locking lever 11 is adapted to operate. The locking lever 11 is hinged to a loop 12 formed on the band 5 near the end opposite the loop 8. The locking lever 11 is provided with a series of notches 13 which are adapted to receive the end portion 14 of the link 9.

In practice, the ring 3 may be permanently fastened in position in one of the garment members, if desired, but it is only necessary to make it of a sufficient diameter to be frictionally held in position. When the ring 3 has been placed in position, the portions to be joined are overlapped, with the elastic packing band 6 interposed, if desired, as shown more clearly in Fig. 2. The clamping band 5 is then placed in position in alinement with the ring 3, and the portion 14 of the slotted link 9 placed in engagement with one of the notches 13 of the lever 11, as shown in Fig. 4. The lever 11 is then moved to the position shown in Fig. 3 and thereby brings the ends of the split clamping band 5 together. Thus the parts 1 and 2, and the packing band 6, if used, are tightly and evenly compressed between the supporting ring 3 and clamping band 5.

In Fig. 9 is shown the manner in which a glove 15 can be connected with a sleeve 16 and it is obvious that the connecting device can be applied at other places.

The present invention possesses many advantages. A complete suit of waterproof garments can be provided, all of which can be quickly connected to form a union suit, and can be as readily disconnected to be used separately. Also, if a single garment or portion only of the suit should be destroyed or worn out, it is necessary to replace the worn-out portion only.

Obviously, my device is capable of considerable modification within the scope of my invention, and

therefore I do not wish to be limited to the specific construction shown and described.

What I claim as my invention and desire to secure by Letters Patent is:

1. A waterproof garment comprising overlapping sleeve-like portions and means for detachably connecting them, said means comprising a supporting ring inside of the inner portion and a split band around the outer portion, the ends of said band being arranged to overlap and being provided with means for tightening the band, said tightening means comprising a slotted link pivotally mounted on one end of said band and a notched locking lever pivoted on the other end of said band and arranged to coöperate with said link.

2. A waterproof garment comprising overlapping sleeve-like portions and means for detachably connecting them, said means comprising a supporting ring inside of the inner portion and a split band around the outer portion, the ends of said band being arranged to overlap and being provided with means for tightening said band, said tightening means comprising a slotted link pivotally mounted on one end of said band and a notched locking lever pivoted on the other end of said band and arranged to coöperate with said link, the pivot point of said locking lever being further from the normal surface of the band than said link.

3. A waterproof garment comprising overlapping sleeve-like portions and means for detachably connecting them, said means comprising a supporting ring inside of the inner portion and a split band around the outer portion, the ends of said band being arranged to overlap and being provided with means for tightening said band, said tightening means comprising a curved slotted link pivotally mounted on one end of said band and a curved notched locking lever pivoted on the other end of said band and arrange to coöperate with said link, the pivot point of said locking lever being further from the normal surface of the band than said link, and said link and said lever being arranged to lie substantially parallel with the outer surface of said band.

Signed at Boulder, Clinton county, Illinois, this 15 day of June, 1906.

BRUCE C. HATHAWAY.

Witnesses:
E. McSPIRRITT,
CARRIE HATHAWAY.