United States Patent [19]

Walker

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[54] **BOOT AND DETACHABLE EXTENSION THEREFOR**

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[21] Appl. No.: **191,514**

[52] **U.S. Cl.** **36/1.5**

[51] **Int. Cl.** **A43b 3/00**

[58] **Field of Search** ..... 36/1.5, 2.5 R, 7.1, 36/7.3, 4

[56] **References Cited**

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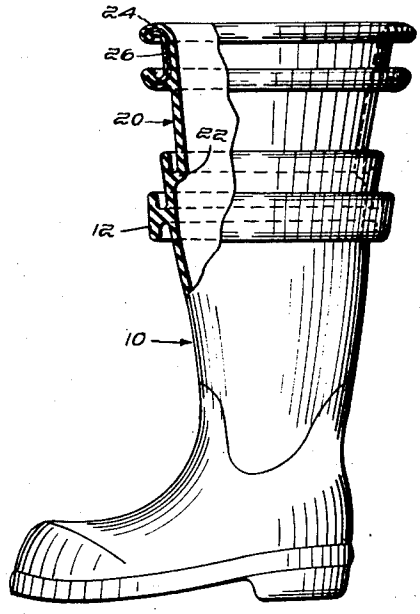
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[57] **ABSTRACT**

A sportsman's boot of rubberized fabric or the like provided with a separate extension, the boot and the extension being each provided with cooperating connecting portions for attachment one to the other.

11 Claims, 9 Drawing Figures



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SHEET 1 OF 3

Fig. 1.

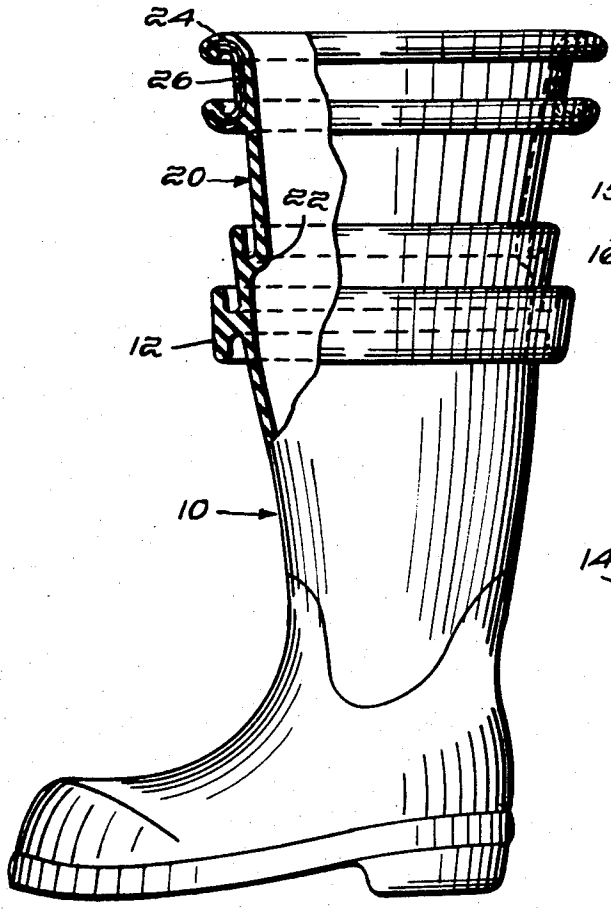


Fig. 2.

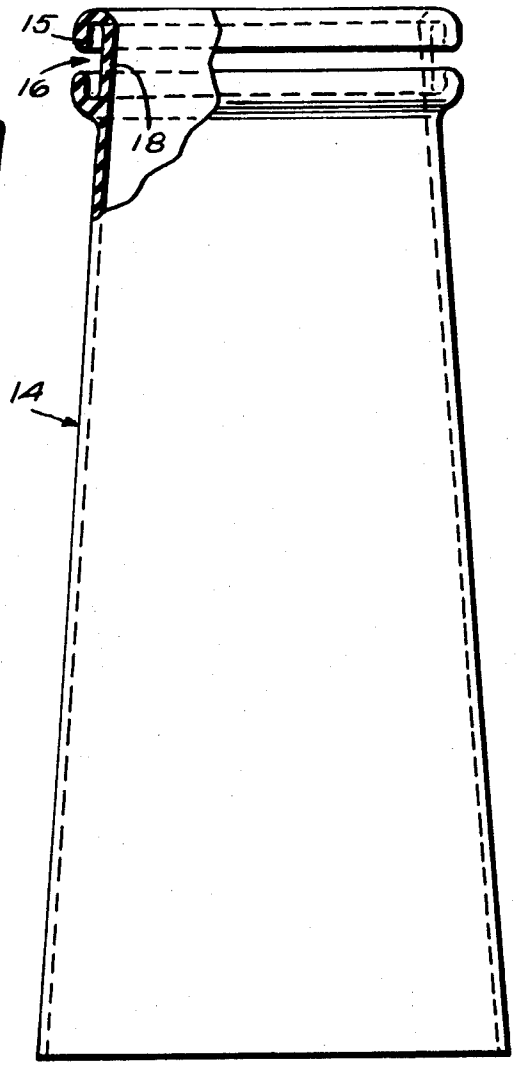
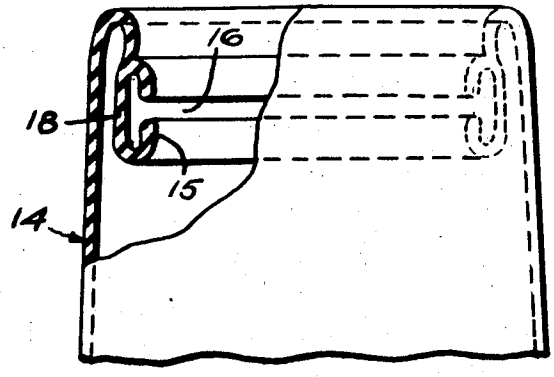


Fig. 3.



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Fig. 4.

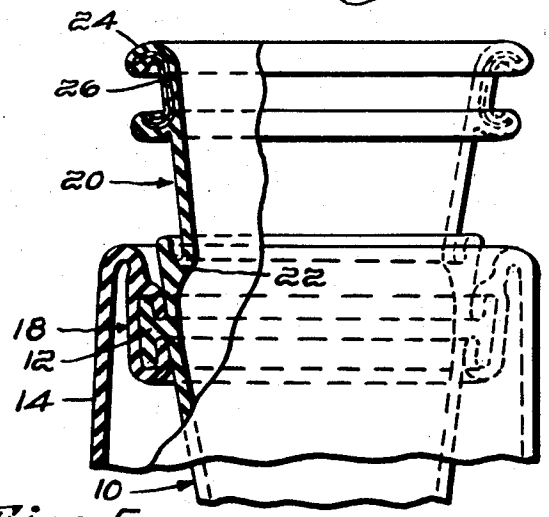


Fig. 5.

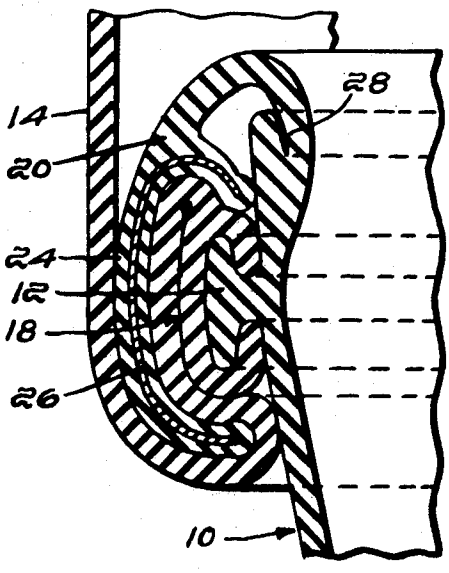
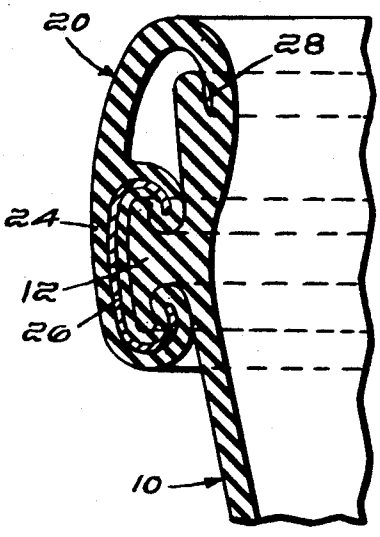


Fig. 6.



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Fig. 7.

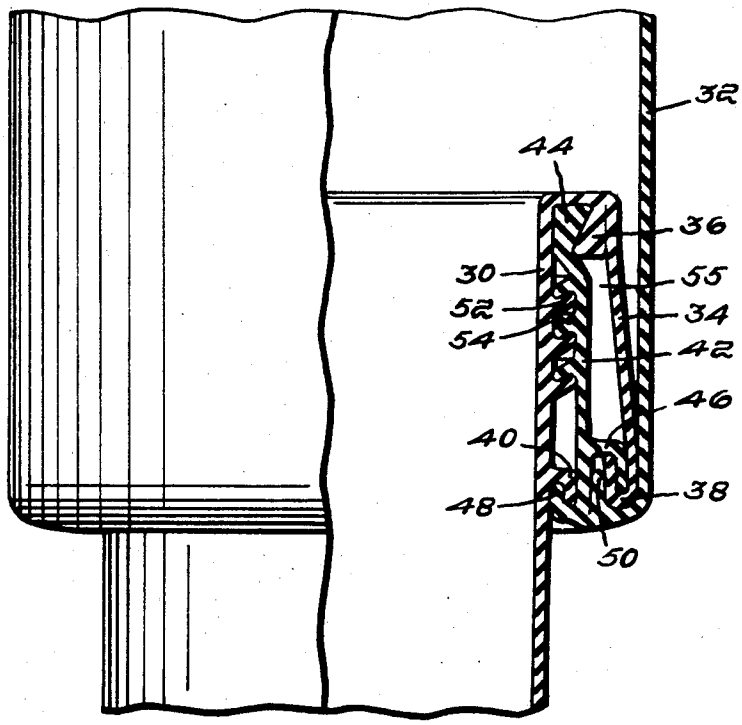


Fig. 8.

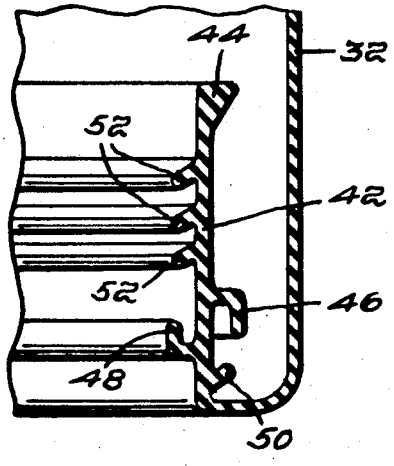
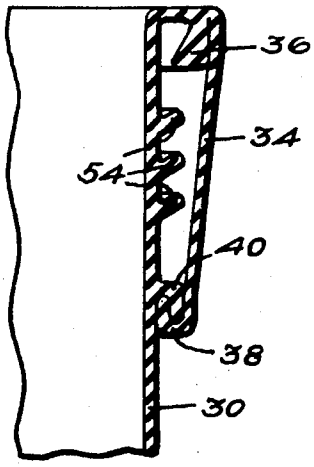


Fig. 9.



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BOOT AND DETACHABLE EXTENSION THEREFOR

This invention relates to a boot such as a hunting or fishing boot.

The invention has for an object to provide a novel and improved boot and a separate extension therefor, the boot and the extension each having novel cooperating attaching portions to provide a substantially leakproof connection.

The invention has for a further object to provide a novel and improved boot of the character specified having cooperating attaching portions providing a leakproof joint between the boot and the extension wherein the boot is provided with a clamping element engaging the connecting joint.

With these general objects in view and such others as may hereinafter appear, the invention consists in the boot and in the extension therefor as hereinafter described and particularly defined in the claims at the end of this specification.

In the drawings illustrating the preferred embodiment of the invention:

FIG. **1** is a side elevation partly in cross section of a boot embodying the present invention;

FIG. **2** is a side elevation partly in cross section of a boot extension adapted for attachment to the boot;

FIG. **3** is a detail view partly in cross section of the connecting end of the extension preparatory to assembly with the boot;

FIG. **4** is a view partly in cross section of the extension assembled with the boot;

FIG. **5** is a cross sectional detail view of the connection engaged by a clamping element and with the extension pulled up;

FIG. **6** is a detail view in cross section of the boot with the extension removed and with the clamping element in place over the boot part of the connection;

FIG. **7** is a view partly in cross section of a modified form of the connecting portions of a boot and detachable sleeve embodying the present invention shown in assembled condition;

FIG. **8** is a cross sectional detail view of the connecting portion of the sleeve detached from the boot; and

FIG. **9** is a cross sectional detail view of the connecting portion of the boot showing the boot without the detachable sleeve.

In general, the present invention contemplates a boot of rubberized fabric or other flexible waterproof material such as is worn by hunters, fishermen and other sportsmen who travel through the woodlands. Generally, the hunter prefers to wear a relatively short boot so as to cut down on the weight of his equipment. However, at times, he may be obliged to ford a small stream or walk through a swampy area where the water may be deeper than the height of the short boots. In such event, the user may attach the boot extensions to the boots, both the boots and the extensions being provided with cooperating connecting portions to form a connecting joint. The assembled connecting portions provide a substantially leakproof connecting joint, and provision is further made for clamping the connecting joint to assure a substantially watertight connection. The illustrated connection may also be used with advantage for connecting a chest-high wader attachment to the upper ends of hip boots.

Referring now to the drawings and particularly to FIG. **1**, the boot indicated generally at **10** comprises a

rubberized fabric material and is provided with a T-shaped band or ring **12** formed integrally with the boot and which comprises one of the connecting portions for cooperation with the boot extension. The boot extension **14** shown in FIG. **2** comprises an elongated sleeve having a band portion **15** defining a T-shaped annular slot **16** at its upper end. The band **15** is formed integrally with the sleeve **14** and forms the connecting portion for cooperation with the boot connecting portion comprising the T-shaped ring **12** forming, in effect, a tee and slot connection.

Both the T-shaped ring **12** and T-shaped slot **16** comprises resilient material adapted to be manipulated to insert the T-shaped ring **12** into the annular slot **16.** In practice, as illustrated in FIGS. **3** and **4,** the upper end of the extension sleeve **14** is turned inwardly preparatory to assembly with the boot. The sleeve may be assembled with the boot either on or off the foot, and in any event, the sleeve is pulled up over the boot until the slotted portion **16** is aligned with the T-ring **12,** whereupon the ring may be manipulated to insert the T into the slot **16** to provide the connection **18** as shown in FIG. **4.** At this time, the sleeve **14** may be pulled up and secured to the thighs in the usual manner, thus converting the short boots to a pair of hip boots to permit wading in deeper water.

From the description thus far, it will be seen that a simple manipulation of the flexible connecting elements to insert the ring **12** into the slot **16** provides the boot with a novel and easily assembled extension. However, in order to assure a leakproof structure, provision is preferably made for clamping the connecting joint **18.** As shown in FIGS. **4** and **5,** the clamping element comprises a tubular extension **20** from the boot vulcanized at its lower end to the inside of the boot, as indicated at **22,** and provided at its upper end with a C-shaped annular clamping member **24** having a spring metal core **26.** In operation, the tubular clamping element is stretched outwardly and downwardly and applied over the adjacent end of the sleeve **14** and the connection **18,** as shown in FIG. **5,** whereupon the sleeve portion is pulled up and secured in the usual manner. The clamping member **24** may be pressed and snapped over the connection **18** by virtue of the spring metal core **26** to assure a leakproof connecting joint. FIG. **6** illustrates the use of the tubular clamping element **24** as applied over the T-shaped ring **12** to protect the ring when the extension **14** is not in use.

From the above description it will be seen that the present structure of boot and extension therefor provides a novel connecting joint and a clamping element applied over the connecting joint whereby to produce a substantially leakproof joint between the boot and the extension. It will be seen that any water seeking to enter the boot would have to follow a path between the T and the slot, then over the top edge of the boot and terminating at the point **28** where such water would be trapped between the upper end of the boot and the tubular extension **20.**

It will be understood that while the T-shaped ring has been herein defined as formed integrally with the boot and the T-shaped slot has been described as formed integrally with the extension, it is contemplated that the connecting elements could be reversed to provide the ring on the sleeve and the slot on the boot within the scope of the present invention.

Referring now to FIGS. 7, 8 and 9 illustrating a modified form of the invention, the boot portion partially shown is represented generally at 30, and the detachable extension or sleeve portion is represented generally by the numeral 32. As herein shown, the upper end of the boot 30 is provided with an annular turned down tubular portion 34 formed integrally therewith having a triangular or wedge shaped annular member 36 projecting from its inner surface adjacent the upper end of the boot. The lower or free end of the turned-down portion 34 is provided with an inwardly turned band 38 L-shaped in cross section. The boot is further provided with annular band 40, L-shaped in cross section, projecting from its outer surface at a point spaced downwardly from the top of the boot as shown.

The boot extension or sleeve 32, shown in detail in FIG. 8, and in assembled form in FIG. 7, has an inwardly turned up portion 42 provided with cooperating elements adapted for connection with the annular elements formed integrally with the boot. Thus, the upper or free end of the turned up portion 42 is provided with a triangular or wedge shaped ring portion 44 adapted for insertion into the space adjacent the wedge shaped ring portion 36 for cooperation with the latter to form connecting elements. Since the parts are flexible and resilient the ring shaped wedge portions 36 and 44 may be easily manipulated into cooperating sealing engagement as shown. The tubular sleeve 32 is also provided with annular connecting elements 46, 48, L-shaped in cross section, the portion 46 being adapted for cooperation with the annular portion 38 of the turned down boot portion 34, and the portion 48 being adapted for cooperation with the annular portion 40 extending from the boot 30 as shown assembled in FIG. 7. The turned up portion 42 of the sleeve 32 is further provided with an annular projection 50 adapted to engage the connecting joint 38, 46 to hold it tight when the sleeve 32 is pulled up in use.

The boot 30 and the turned up portion 42 of the sleeve are further provided with cooperating annular portions 52, 54 arranged at an angle and engaged in overlapping relationship in their assembled condition as shown in FIG. 7. FIG. 9 illustrates the use of the L-shaped band or ring 38 as applied over the oppositely directed L-shaped band 40 to protect the connecting elements when the sleeve extension 32 is not in use. It will be understood that only the connecting portions at the upper end of the boot and at the lower end of the sleeve or extension are shown herein, the rest of the boot and sleeve being similar to those shown in FIGS. 1 and 2.

As thus described, it will be seen that the connecting elements between the boot 30 and the sleeve 32 are adapted to provide a substantially leakproof structure. As illustrated in FIG. 7, entrance of water through the structure is prevented by the L-shaped connecting elements 46, 48; the overlapping annular portions 52, 54; and the cooperating wedge shaped connecting elements 34, 44. Any water which might possibly pass into the space 55 between the portions 34, 42 would be trapped therein by the joint formed by the L-shaped connecting elements 38, 46 and the projection 50 engaging and tightening the joint when the sleeve 32 is pulled up in use.

Having thus described the invention, what is claimed is:

1. A boot and a detachable extension therefor comprising a boot of flexible waterproof material having a connecting element adjacent its upper end formed integrally therewith, and an extension of flexible waterproof material having a cooperating connecting element at one end thereof formed integrally therewith and forming with said first connecting element a substantially leakproof joint, and a clamping element formed integrally with said boot and adapted to be resiliently applied over said joint to prevent leakage therethrough.

2. A boot and extension as defined in claim 1 wherein the clamping element is carried by the free end of a flexible tubular portion, the fixed end of the tubular portion being connected to the inside of the boot.

3. A boot having a connecting element for cooperation with an extension, and a clamping element formed integrally with said boot and adapted to be applied to said connecting element to conceal and protect the same when the extension is not in use.

4. A boot and a detachable extension therefor comprising a boot of flexible waterproof material having a connecting element comprising a T-shaped ring formed integrally therewith, a tubular extension of flexible waterproof material having an annular slotted member formed integrally therewith and adapted to receive said ring to provide a connecting joint, and a clamping element formed integrally with said boot and applied over said joint to render the same substantially waterproof.

5. A boot and extension as defined in claim 4 wherein the lower portion of said tubular sleeve is folded down over said joint prior to applying the clamping element whereby the entire joint is concealed by said extension upon drawing the latter upwardly.

6. A boot and a detachable extension therefor comprising in combination, a boot of flexible waterproof material, a detachable extension of flexible waterproof material, the upper portion of the boot having spaced connecting elements, and the lower portion of said extension also having correspondingly spaced cooperating connecting elements, the boot having an integral outwardly downturned tubular portion, having an upturned lip and the extension having an inwardly upturned turned portion, the spaced connecting elements of the extension turned upwardly and cooperating with the correspondingly spaced connecting elements of the boot between the downturned tubular boot extension and the boot and the upturned lip cooperating with a connecting element on the extension.

7. A boot and extension as defined in claim 6 wherein the free end of said inwardly upturned tubular portion of the extension is provided with a circular connecting element triangular in cross section for cooperation with a similar connecting element formed integrally with the upper end of said tubular downturned portion of the boot, the free end of said downturned tubular portion having a circular band L-shaped in cross section for cooperation with an oppositely directed similar band formed on said upturned portion providing an L-shaped joint.

8. A boot and extension as defined in claim 7 wherein a second circular band L-shaped in cross section disposed at the lower end of said upturned portion of the extension cooperates with an oppositely directed similar band formed on the boot providing a second L-shaped joint.

9. A boot as defined in claim 8 wherein the L-shaped circular connecting element formed at the free end of said downturned tubular portion is adapted to engage with the L-shaped connecting element formed on the boot when the extension is not in use.

10. A boot and extension as defined in claim 8 wherein said upturned portion is provided at its lower end with a projection adapted to engage said first L-shaped joint to hold the same frictionally tight upon pulling the extension upwardly.

11. A boot and extension as defined in claim 10 wherein the boot is provided with a plurality of circular projections adapted for overlapping engagement with similar projections extended from the upturned portion of said extension.

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