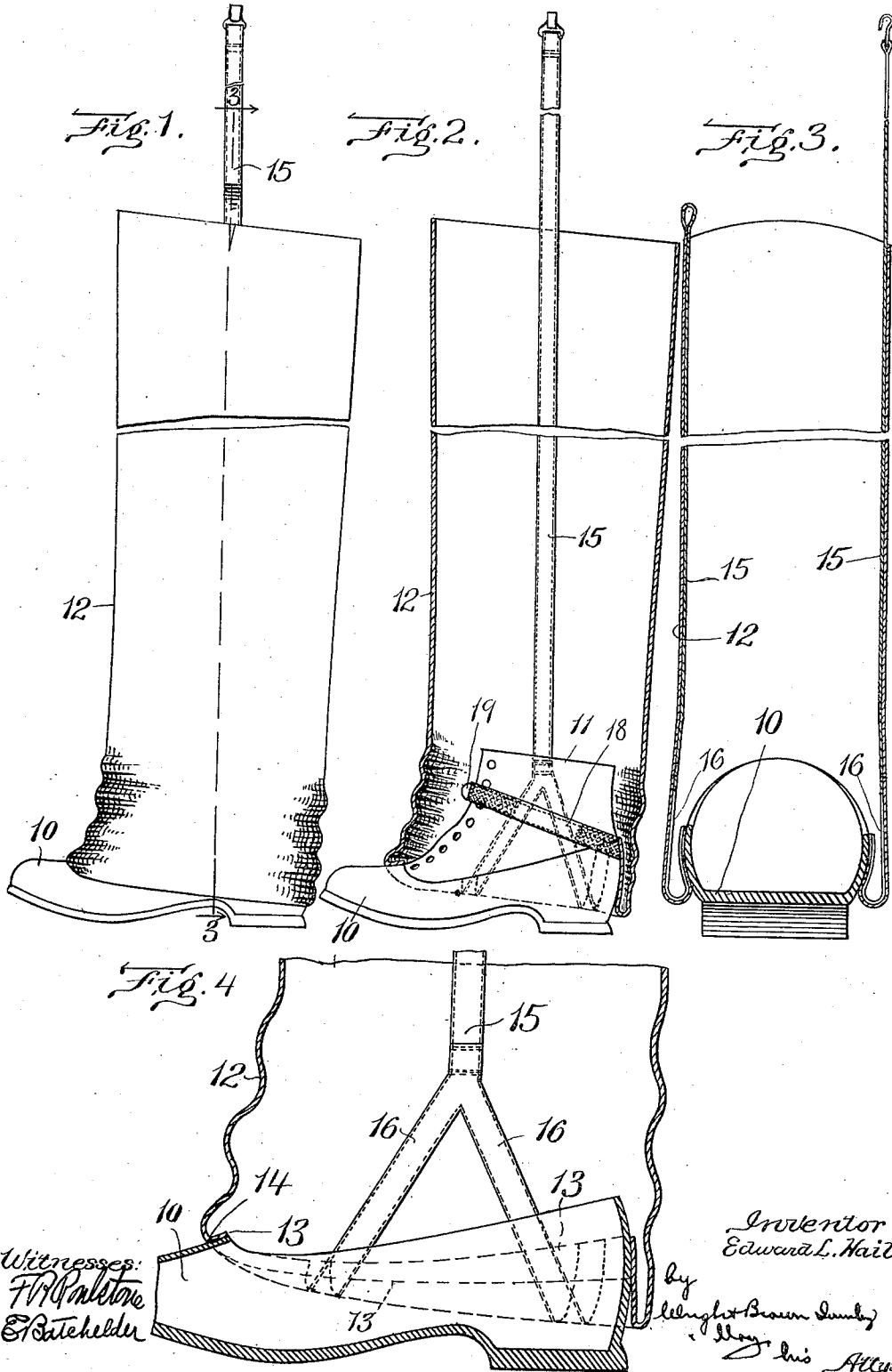


E. L. HAIL.
WATERPROOF OVERSHOE AND LEGGING.
APPLICATION FILED MAY 7, 1910.

1,014,873.

Patented Jan. 16, 1912.



UNITED STATES PATENT OFFICE.

EDWARD L. HAIL, OF PROVIDENCE, RHODE ISLAND.

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Specification of Letters Patent.

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To all whom it may concern:

Be it known that I, EDWARD L. HAIL, of Providence, in the county of Providence and State of Rhode Island, have invented certain new and useful Improvements in Water-proof Overshoes and Leggings, of which the following is a specification.

The object of the present invention is to provide a waterproof over shoe and legging of the boot nature which is light in weight and so flexible as to avoid discomfort to the wearer, and by which means trousers and shoes may be fully and conveniently protected against sleet, rain, snow, slush or water while allowing the trousers to hang naturally and without creasing or crushing or disarranging the garments.

The invention combines a rubber shoe to be worn over the leather shoe, and a legging portion composed of water-proof material which is relatively thin, light, and flexible. The legging portion is permanently attached to the rubber shoe by a water-proof seam and the junction of the legging and shoe is such as to permit the requisite freedom of movement of the shoe occasioned by the ankle movement of the wearer.

The article composed of the aforesaid parts serves the purpose of an ordinary rubber boot which is composed of relatively thick and heavy material and which is adapted to remain in an extended condition by reason of the stiffness of the material. The excessive weight of the ordinary rubber boot and the stiffness due to the thickness of the material occasion discomfort to the wearer, and the trousers are creased and wrinkled by being folded or wrapped around the legs of the wearer in order to permit the boot leg to be drawn on over them. These causes of discomfort and the wrinkling of clothing are avoided by the present invention. The legging portion of the present invention when unsupported falls upon the shoe portion because of the extreme flexibility of the material of which it is composed, and it is proposed to fasten the upper end of the legging at the desired height by attaching it to the clothing of the wearer. The legging portion may be of any desirable length, preferably to cover the knees, and fastened or held in that position by any suitable means, such as an extension strip or

strap to be hooked to the waistband of the trousers or over a suspender button.

The legging portion provides ample space for the reception of full length trousers legs, and the lower end of the legging portion is attached to the shoe portion in a manner which provides a pocket for the reception of the bottom of the trousers leg. This pocket formation may be reinforced or made of heavier material to assist in holding its conformation and position against pull or stress of any kind. The shoe portion may be provided with a fastening device such as an ankle strap adapted to encircle the ankle of the wearer and hold the heel end of the shoe portion upon the foot of the wearer. The device may also be provided with side strips of non-elastic material attached directly to the shoe portion and also to the legging portion to support the legging portion in its extended position.

Of the accompanying drawings which illustrate the invention, Figure 1 represents a side elevation thereof. Fig. 2 represents a side elevation of the rubber shoe portion in position upon the boot of the wearer, the legging portion being shown in section. Fig. 3 represents a section on line 3—3 of Fig. 1. Fig. 4 represents on a larger scale a vertical section of the lower edge portion of the article.

The same reference characters indicate the same parts wherever they occur.

On the drawings a rubber over shoe of ordinary construction is indicated at 10. The rubber shoe, as shown by Fig. 2, may be slipped upon the boot 11 of the wearer. The legging portion is indicated at 12, and is composed of relatively thin, flexible water-proof gossamer material such as rubber, or textile fabric impregnated with a water-proof substance. The lower end of the legging portion is attached by cement or other means to the rubber shoe 10 so as to effect a water-proof seam or joint. The marginal portion of the lower end of the legging portion is turned up and is fastened to the rubber shoe between the edge 13 and the line 14 as shown by Fig. 4, thus forming a circumferential pocket to receive the bottom of the trousers. The seam entirely surrounds the opening in the shoe 10 through which the boot 11 is inserted.

15, 15 indicate strips of nonelastic mate-

rial such as side seams, cords or webbing, whose lower ends are attached to the sides of the shoe approximately midway of the arch, or triangular pieces 16 of heavier substance may be used whose lower sides may be attached to the sides of the overshoe and the non-elastic flexible strips attached to the apex of the triangular pieces at or opposite to the ankle joint, thereby providing for a rocking or joint action. The legging material itself if non-elastic may perform the function of the strips. The upper ends of the strips 15 may be extended above the legging portion for fastening purposes, and the intermediate portions of the strips may be attached to the legging portion 12 by rows of stitching or by cement. The wearer, after drawing the rubber shoe 10 upon the boot 11, may draw the legging portion upon the leg by means of the strips 15 and may hold the legging in its extended position by means of the fastening strips or straps.

When the legging portion is suspended in position for use as shown by Figs. 1 and 2 the front and rear portions of the legging being cut a little full are loose and hang in folds or wrinkles. The side portions, however, are drawn up to their full height so that there is no excess material hanging at the sides or shank of the foot. The purpose of providing excess material at the front and back is to permit requisite freedom of the rocking movement of the shoe due to the ankle movement of the wearer without causing a strain upon either front or back of the legging, the front and back portions being thus adapted to fold and unfold as the shoe is rocked first in one direction and then in the other upon the junction of the strips and sides of the overshoe or the apex of the triangular pieces.

A strap such as that indicated at 18 may be provided for fastening the heel portion of the rubber shoe upon the foot of the wearer. The strap may be permanently attached to the shoe 10 and may be provided with a buckle 19, or other device, by which its ends may be connected upon the instep.

It will be observed that the article constructed and attached in the manner described is but slightly heavier than the ordinary rubber shoe but that it affords all of the advantages of a rubber boot or "arctic" overshoe and does not embody the ob-

jectionable features which are found in a rubber boot or arctic overshoe. The freedom of movement of the ankle is apparent.

It is not necessary to fold the legs of full length trousers about the ankle in order to apply the legging, but the trousers legs may be permitted to hang in their ordinary condition because of the pocket provided by the up-turned fold at the junction of the legging and rubber shoe. The pocket formation may be varied in construction, as by joining the legging portion to the shoe at a low level, the pocket then being formed by the opening between the outer walls of the shoe and the inside of the legging portion.

Having thus explained the nature of my said invention and described a way of constructing and using the same, although without attempting to set forth all of the forms in which it may be made or all of the modes of its use, what I claim is:—

1. The combination with a water-proof shoe, of a legging composed of thin flexible water-proof gossamer material attached at its lower end to said shoe by a continuous water-tight joint, said legging being of such circumferential proportion as to receive a loose trousers leg and turned up at its lower end to form a pocket for the lower end of the trousers leg, said legging having excess material at the front and rear, and non-elastic strips at the sides of the legging between the excess material attached to the sides of the shoe and extending to the upper end of the legging.

2. The combination with a water-proof shoe, of a legging composed of thin flexible water-proof material attached at its lower end to the shoe by a continuous water-tight joint, said legging being provided with material at the front and rear above the shoe in excess of the side portions, whereby said front and rear portions may hang in folds when the legging is drawn up to eliminate slack from said side portions, and non-elastic strips at the sides of the legging between the front and rear portions and attached to the sides of the shoe.

In testimony whereof I have affixed my signature, in presence of two witnesses.

EDWARD L. HAIL.

Witnesses:

GEORGE HAIL,
HENRY A. GREENE.