(No Model.)

2 Sheets—Sheet 1.

J. L. TYLER, Jr.

RUBBER BOOT.

No. 335,256. Patented Feb. 2, 1886.

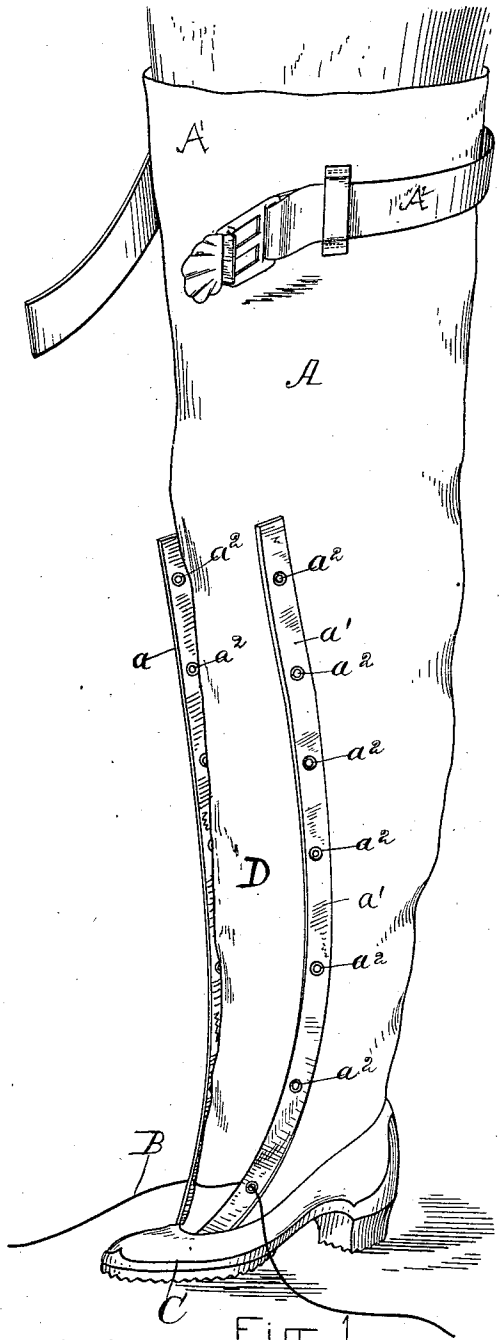


Fig. 1.

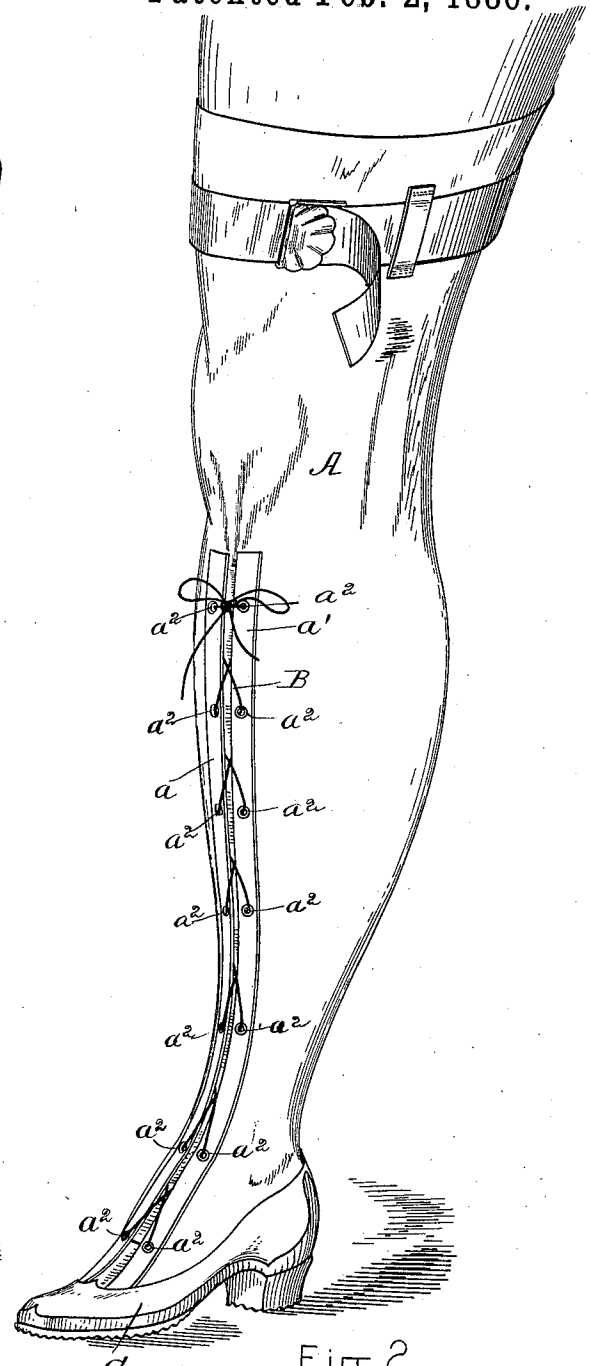


Fig. 2.

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Thos. S. Gooding.
Fred. B. Dolan.

INVENTOR:
James L. Tyler Jr.
by his Attys
Clarke & Raymond.

N. PETERS. Photo-Lithographer. Washington, D. C.

(No Model.) 2 Sheets—Sheet 2.

J. L. TYLER, Jr.

RUBBER BOOT.

No. 335,256. Patented Feb. 2, 1886.

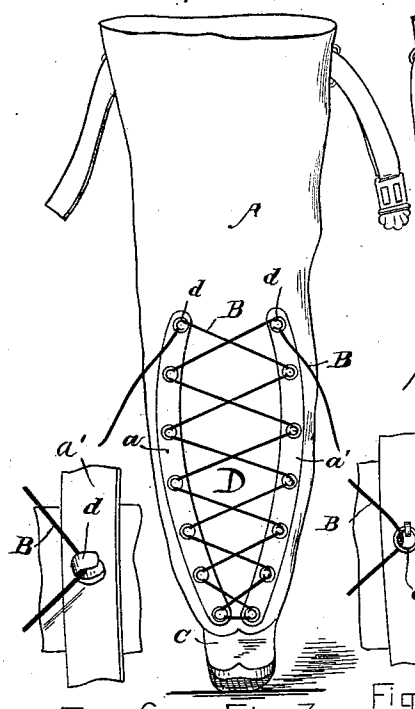


Fig. 6. Fig. 3.

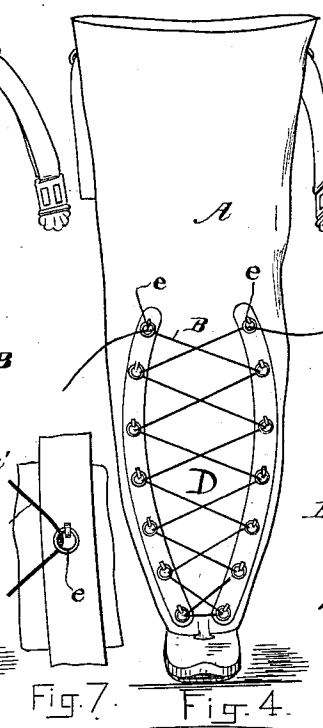


Fig. 7. Fig. 4.

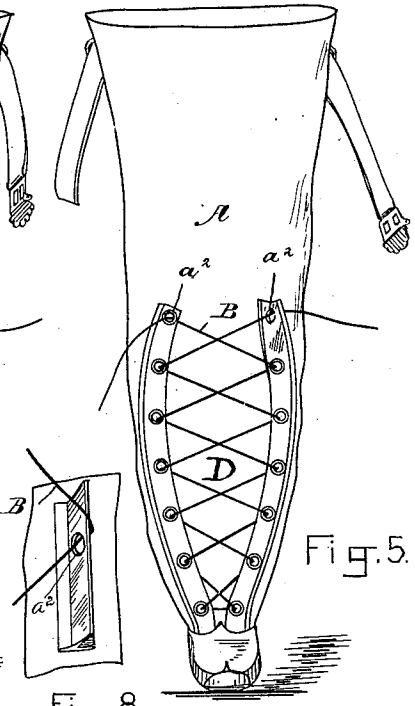


Fig. 8. Fig. 5.

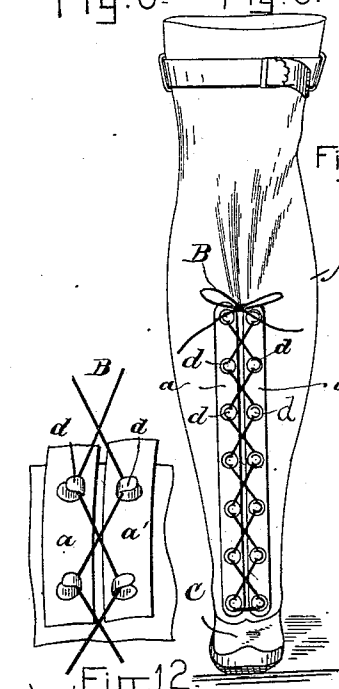


Fig. 9. Fig. 12.

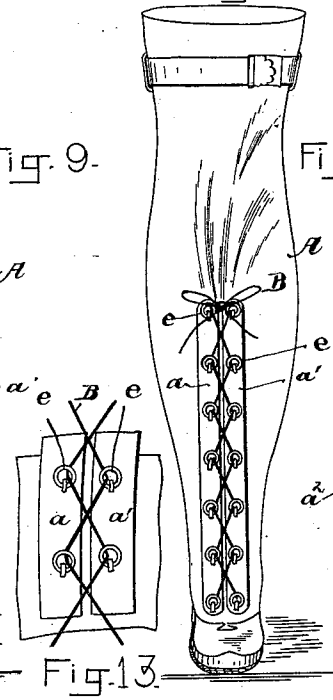


Fig. 10. Fig. 13.

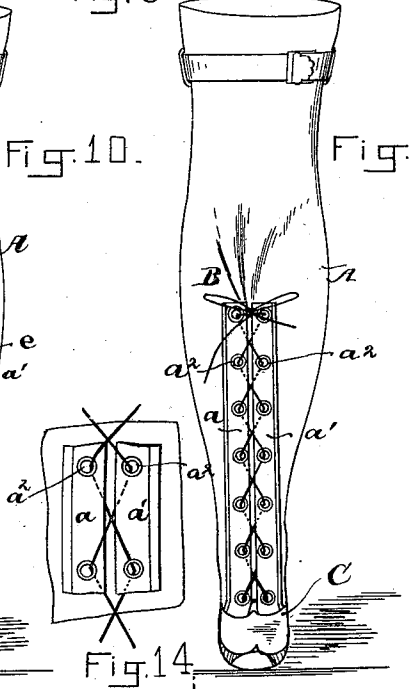


Fig. 11. Fig. 14.

WITNESSES.

Chas. S. Hooding.

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INVENTOR:

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by his attys

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UNITED STATES PATENT OFFICE.

JAMES L. TYLER, JR., OF BOSTON, MASSACHUSETTS.

RUBBER BOOT.

SPECIFICATION forming part of Letters Patent No. 335,256, dated February 2, 1886.

Application filed July 6, 1885. Serial No. 170,739. (No model.)

To all whom it may concern:

Be it known that I, JAMES L. TYLER, Jr., of Boston, in the county of Suffolk and Commonwealth of Massachusetts, a citizen of the United States, have invented a new and useful Improvement in Rubber Boots, of which the following is a full, clear, and exact description, reference being had to the drawings forming a part of this specification in explaining its value.

The invention consists of a new and improved water-proof leggin of gossamer or other similar thin water-proof material, attached in a water-proof manner, by vulcanization, sewing, cementing, or otherwise, to any rubber shoe of the usual thicknes, and forming, in connection with said rubber shoe, a rubber boot, the invention being an improvement upon the rubber boot invented by John J. Williamson, of Boston, Massachusetts, described in his Letters Patent of the United States No. 296,495, and dated April 8, 1884.

The rubber boot designed by me may be worn either with or without a leather boot or shoe, but is preferably to be worn over the leather boot or shoe of the wearer. It becomes a matter of prime necessity, therefore, to secure a large amount of fullness throughout the whole extent of the gossamer leg portion of the rubber boot, in order that the foot of the wearer may pass readily through the said leg portion into the foot portion without straining or tearing the gossamer.

By Williamson's method the gossamer leg portion of his rubber boot is made, preferably, of the general shape and contour of the leg and ankle of the wearer, and the necessary fullness is obtained by means of elastic gores, the said elastic gores, by stretching, furnishing a temporary fullness while the foot of the wearer is being pulled or pushed into the foot portion of the rubber boot. If, on the other hand, the gossamer leg portion is not cut according to the general contour of the leg of the wearer, but is cut large enough to admit readily the foot of the wearer incased in a leather boot or shoe, then the said gossamer leg portion bags at the ankle and lower part of the calf of the leg of the wearer after the boot is pulled on.

It is the object of my invention to do away with this bagginess or fullness, and I have therefore devised and invented the following improvement: I cut the gossamer leg portion either in one or two pieces, but preferably in one piece, or out of whole cloth. I use no elastic gore or gores, but cut the gossamer leg of a sufficient size to admit readily, without traction or liability to tear the gossamer, the foot of the wearer incased in the ordinary leather boot or shoe. I then attach to the front or sides or back of the gossamer leg, but preferably to the front, by vulcanization, sewing, cementing, or any other method of attachment, two rows of ordinary shoe hooks or studs at suitable distances apart, or two rows of small rings or eyelets. These studs or hooks, or rings or eyelets, are attached either to the body of the gossamer itself, or to stays or re-enforcing pieces or flaps, which latter are attached to the gossamer. I place the rows of studs or rings or eyelets at a distance from each other varying from a fraction of an inch to several inches, but far enough distant from each other so that the gossamer leg portion shall conform to and fit snugly the calf and ankle of the wearer, after the fullness which lies between the said rows of studs or rings or eyelets is gathered in by means of a lacing, which draws the said rows more closely together and confines or puckers or gathers in the said fullness about the ankle and calf of the wearer.

Referring to the drawings accompanying this specification, the boot as made by me is shown in three different styles, both on and off the foot of the wearer.

In Sheet 1, Figure 1 shows a large view in perspective of the rubber boot made with flaps and eyelets on the foot and leg of the wearer, but not laced up. Fig. 2 in the same sheet shows the same boot laced up.

In Sheet 2, Fig. 3 shows a front view of a boot made with shoe studs or hooks open to admit the foot of the wearer. Fig. 9 shows the same boot laced up. Fig. 4 shows a boot made with rings open; Fig. 10, the same boot laced up. Fig. 5 shows a boot made with flaps and eyelets (as in Figs. 1 and 2, Sheet 1) open; Fig. 11, the same boot laced up. Figs. 6, 7, 8, 12, 13, 14 represent enlarged detail views of the three different methods of holding the lacing and gathering in the fullness.

In both sheets A represents the gossamer

leg portion of the boot; B, the lacing; C, the foot or rubber shoe portion, and D the section or fullness lying between the rows of hooks or studs, or rings or eyelets.

a represents one flap or re-enforcing piece or stay attached to the leg portion; *a'*, the other, the two flaps being designed to be drawn together by the lacing B and the fullness D confined by the said lacing, at the same time conforming the gossamer leg of the boot to the shape of the leg of the wearer.

a^2 represents the eyelet-holes in the flap and eyelet style.

d represents the shoe hooks or studs in the hook or stud style, and *e* represents the rings in the ring style.

A boot made by cutting the leg portion large and full and then disposing of the fullness in the manner described is superior to a boot made with elastic gores, for the following reasons: First, it is cheaper; secondly, it secures a more shapely leg portion to the rubber boot, and by means of the lacing the said leg portion is fitted and conformed more readily to different sizes and shapes in the legs and ankles of different wearers; thirdly, by dispensing altogether with elastic gores a leg portion is secured much more likely to be and continue water-proof, as the leg portion is cut whole, and there are no lines or places of joining between gores and gossamer which are liable to leak; fourthly, the rubber boot made according to my device is gotten on and off much more easily than when elastic gores are used, and is not so liable to strain or tear the gossamer. Rows of hooks and eyes, or of straps and buckles, may also be used to gather in the fullness, said hooks and eyes, or straps and buckles, either being attached directly to the gossamer leg portion, or to a flap secured to the leg portion, or to elastic straps secured to the leg portion. Rows of buttons and button-holes may also be used, either secured directly to the leg portion or to flaps wider than the flaps shown in the drawings, large enough, in fact, to completely cover up and confine the fullness.

One or two lacing-strings, with no device whatever for holding them, may be fastened to the lower part of the gossamer leg portion, or attached to the top of the rubber shoe portion, and then wound around the ankle and calf of the wearer and tied, in order to confine the fullness, after the boot is pulled on; or any method of securing two edges together, temporarily, may be employed.

I do not confine myself to any definite and specific method of gathering in the said fullness any one of the methods described being practical.

The essential spirit of my improvement on the Williamson invention, as patented, consists in dispensing with elastic gores, for the reasons named, and making the gossamer leg portion not shaped like the calf and ankle of the wearer, but large and full enough to allow the foot incased in a leather boot or shoe to pass readily through it, and then gathering in the fullness to conform the gossamer leg portion to the calf and ankle of the wearer in any of the ways described, or in any suitable way.

If desired, the leg may be extended above the section adapted to be laced to the wearer, and I have so represented the boot in the drawing, A' representing this upper section of the boot-leg. It is of the same material as the lower section, and it is fastened to the wearer by a strap and buckle, A^2, or in any other desired way.

Having thus fully described my invention, I claim and desire to secure by Letters Patent of the United States—

1. As an improved article of manufacture, a rubber boot having a foot portion formed or constructed of material of ordinary form and thickness, and a leg portion of gossamer or other similar material of uniform thickness throughout, made full at and above the ankle, and having the two lines of lacing devices attached or secured to the outer surface of the leg, from the instep upward above the ankle, adapted to be drawn or secured together after the boot has been put on, to gather in the fullness and fit it to the leg of the wearer, all substantially as and for the purposes described.

2. A rubber boot having the foot portion C, a leg portion, A, of gossamer or other similar fabric, united to the foot and made full at the ankle and immediately above, as described, the stays *a a'*, fastened to the leg of the boot, and supporting lacing devices, and the cord or lacing device B, all substantially as described.

3. The rubber boot having the foot portion C, the leg A, of gossamer or other thin fabric of similar nature, made full at the ankle and section above, two lines of devices attached to the leg for reducing, taking in, or gathering its fullness and fitting it to the leg of the wearer, the section A', and the strap A^2, substantially as described.

JAMES L. TYLER, JR.

Witnesses:
J. M. DOLAN,
F. F. RAYMOND, 2d.