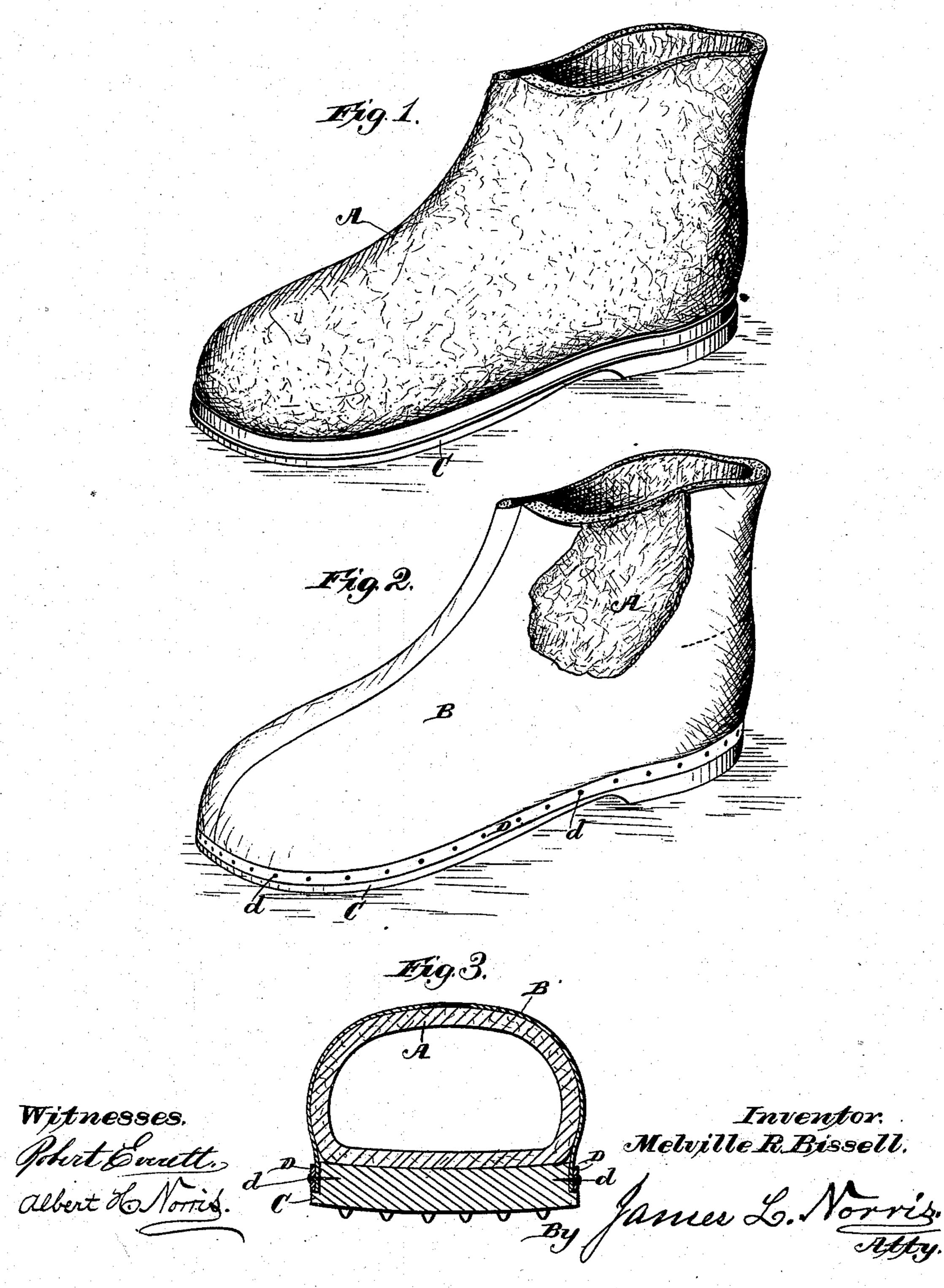
M. R. BISSELL.

WATERPROOF SHOE.

No. 249,497.

Patented Nov. 15, 1881.



United States Patent Office.

MELVILLE R. BISSELL, OF GRAND RAPIDS, MICHIGAN.

WATER-PROOF SHOE.

SPECIFICATION forming part of Letters Patent No. 249,497, dated November 15, 1881.

Application filed September 24, 1881. (Model.)

To all whom it may concern:

Be it known that I, MELVILLE R. BISSELL, acitizen of the United States, residing at Grand Rapids, in the county of Kent and State of Michigan, have invented new and useful Improvements in Water-Proof Shoes, of which the following is a specification.

My invention relates to improvements in that class of boots or shoes which are especially intended for lumbermen and other laborers who

are exposed to cold and wet weather.

The object of my invention is to provide strong, durable, warm, and water-proof boots or shoes, which are capable of being worn in snow and slush and in muddy places without employing separate coverings, whereby I avoid the necessity of using rubbers, which must be drawn over the ordinary shoes, as such is very objectionable for rough work, owing to the liability of the rubbers to become cut and soon

To these ends my invention consists in a boot or shoe composed of an inner body of felt, an exterior covering of weather-protecting fabric applied over the same, but disconnected from the upper thereof, and a wooden sole on which the felt body rests and the exterior covering is attached, all as will be more fully hereinafter

described in detail.

Figure 1 is a perspective view of the inner felt shoe or boot; Fig. 2, a like view of the completed shoe, with a portion of the water-proof covering broken away; and Fig. 3, a transverse section taken through the front portion of the shoe.

The letter A indicates a felt shoe which is composed entirely of felt, the sole and the upper of said shoe being preferably formed integral with each other by compressing the ma-

40 terial upon suitable lasts or forms.

B indicates the outer waterproofed covering for this felt shoe, and C the wooden outer sole to which the waterproofed covering is secured along its lower edge. This covering will be composed of some strong and durable textile material—such as canvas—thoroughly water-proofed by any suitable waterproofing compound or solution, which can be applied in any of the known ways employed for producing a water-proof fabric. It will be provided with such seam or seams as may be requisite to give

it the shape of a shoe-upper, and also to cause it to fit closely upon the inner felt shoe. In its application to the felt shoe or inner felt body, the waterproofed fabric is not vulcanized 55 thereon or attached thereto throughout its extent, but it simply covers the inner felt body or shoe without being permanently joined thereto, and is practically a separate and distinct piece, which greatly reduces the cost of manu- 60 facture and produces a more desirable article. I have illustrated this outer water-proof covering as being secured to the wooden sole by means of screws, tacks, or nails d, passing through a continuous band. D, and through 65 the covering at its lower edge into the edge of the wooden sole. This band will be of leather, waterproofed fabric, or other tough material or metal that will resist the action of the water, and it will obviously prevent the water-proof 70 covering from tearing away from the tacks or nails, and also protect and conceal the lower edge of the said covering.

It is obvious that other means than those just described could be employed for securing 75 the water-proof covering to the wooden soleas, for instance, the edge of the fabric could be turned under and fastening devices employed without the band. The sole or bottom of the innerfelt shoe will fit directly upon the top of the 80 wooden sole, which latter can be coated upon the top and edge with any suitable water-proof varnish; or a thin intermediate layer or waterproof layer of rubber or fabric might be interposed between the felt and the wooden soles, 85 and said waterproofed filling turned down at its edges and secured between the outer waterproof covering, B, and the edge of the wooden sole. Also, if desired, any water-proof cement can be applied between the edge of the wooden 90 sole and the water-proof covering before the two are secured together, in order to form a perfectly tight joint, although the shoe herein shown will be adapted for all practical purposes.

The wooden sole can be formed with the usual 95 heel, and also have any desired number of studs or nails driven into its bottom, so as to form a rough-shod shoe.

Heretofore shoes have been composed of a seamless felt body and an attached outer sole 100 of leather; also of inner and outer layers of cloth, the inner layer having a fuzzy or raised

nap, the two being vulcanized together and a leather sole being attached thereto; also, rubber shoes have been combined with water-proof stockings of knitted or similar fabric; and, further, leather boots and shoes have been provided with wooden soles; but it will be evident that these different styles of boots and shoes, which I hereby disclaim, do not constitute my invention as herein described and claimed.

What I claim is—

As an improved article of manufacture, a boot or shoe consisting of an interior felt body, an

exterior covering of weather-protecting fabric applied over the same, but disconnected from 15 the felt body, and a wooden outer sole on which the felt body rests, and to which the exterior covering is attached, substantially as and for the purpose described.

In testimony whereof I have hereunto set 20 my hand in the presence of two subscribing

witnesses.

MELVILLE R. BISSELL.

Witnesses:

DANIEL G. HICKEY, EDWARD J. JENKINS.