## E. S. CONVERSE.

Improvement in Shoes.

No. 115,169.

Patented May 23, 1871.

FIG.I.

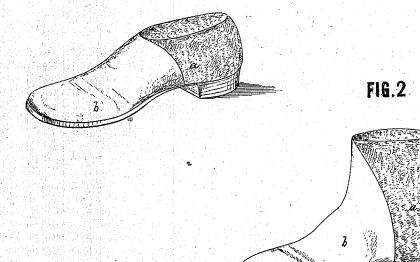
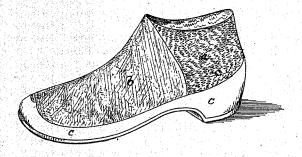


FIG.3.



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WITNESSES. S.M. Pobe

## UNITED STATES PATENT OFFICE.

ELISHA S. CONVERSE, OF BOSTON, MASSACHUSETTS.

## IMPROVEMENT IN SHOES.

Specification forming part of Letters Patent No. 115,169, dated May 23, 1871.

To whom it may concern:

Be it known that I, ELISHA S. CONVERSE, of Boston, in the county of Suffolk and State of Massachusetts, have invented certain new and useful Improvements in Shoes, of which

the following is a specification:

To avoid the use of cords or strings for lacing shoes and securing them to the feet it has been usual to insert in the sides or on the top of the shoe, whether made of leather or other fabric, elastic gores, which are stitched in order to allow the foot to enter the shoe, and then contract to clasp around and hold the foot. The use of gores, however, is objectionable in several respects. It is always difficult and expensive to properly insert them in the body of the shoe; but they are mainly objectionable because, if made of extremely elastic material which will stretch enough to allow the foot to pass into the shoe, they will soon become distended and afford no hold on the foot, and the shoe will soon get out of shape; or, if made of a more resistant but less elastic material, they will either be torn out from the shoe or ruptured. My invention is intended to avoid these objections; and it consists of a shoe, the sides and rear of which are made of one continuous piece of elastic extensible fabric surrounding the whole or the greater portion of the opening through which the foot is insert-ed. This mode of providing for the neces-sary expansion and contraction of the upper part of the shoe is preferable on many accounts to that which requires the use of gores. The fabric is not unduly stretched, and is not, therefore, so liable to become inelastic and stretched entirely out of shape, or to be ruptured and torn from the shoe, as too frequently happens in the case of gores, and the shoe is held to the foot and around the ankle more securely and with a neater fit than otherwise could be attained.

In the drawing I have represented the manner in which my invention is or may be carried into effect.

Figure 1 represents its application to a lowquarter shoe. Fig. 2 is a view of a gaiterboot made in accordance with my invention. Fig. 3 represents a water-proof cloth overshoe to which my invention is applied.

In the gaiter-boot and shoe shown in Figs. 1 and 2, in lieu of the ordinary gores I form the

rear and side portions of that part of the boot or shoe in which the elasticity is required of an elastic or India-rubber cloth or web, a, formed preferably of India rubber lined upon both sides with a knit or other extensible fabric, which is cut to the proper shape to surround the whole or nearly the whole of the opening, and is sewed or otherwise secured to the leather front or upper b of the shoe in the usual way. The shoe thus made possesses greatly-increased elasticity and extensibility in that part which requires especially these qualities; the upper or front is still formed of leather or fabric which will not yield or stretch appreciably, and the shoe will fit more neatly around the ankle, with no danger of the web losing its elasticity, becoming flabby, and hanging loosely about the foot. It is hardly necessary to say that the heel portion, or that portion of the shoe which surrounds the heel, may be stiffened and foxed as is usual in all shoes and boots. The overshoe shown in Fig. 3 is composed of the water-proof inelastic or inextensible cloth upper or front b, the foxing c, and the elastic and extensible quarter a. The quarter a is formed of a sheet of India rubber, the outer and inner surfaces of which are covered with a knit fabric, the inner fabric or lining extending throughout the interior of the shoe. The quarter is applied to the upper or vamp (which is made of rubber coated with cloth or other inextensible material) while the two are in a plastic or green state, the whole shoe-foxing, sole, vamp, quarter, and lining—being put together while the rubber is in that state, and then united by the after process of vulcanizing. The quarter extends around the whole or nearly the whole of the opening for the entrance of the foot, so that this portion of the shoe is very elastic and extensible, and can therefore be made to extend up much higher, and thus cover and protect more of the foot than it could were the quarter inelastic.

With an overshoe of this kind ordinary elastic gores would be of little advantage. Not only is the operation of securing them to the shoe difficult and troublesome, but they are too narrow and small to allow the shoe to be sufficiently stretched at the opening to receive the foot unless the quarter be very low, and even in this event the gores would still be

very liable to tear and break from the shoe. According to my invention, however, while the vamp or front preserves its inelasticity or inextensibility, the whole rear portion of the shoe is elastic, and capable of expanding and contracting to permit the passage of the foot and to close or fit snugly around it, and I thus produce an overshoe which possesses decided advantages over any other in the market, being more durable, and at the same time cheaper than any of which I have any knowledge.

I am aware that shoes have been heretofore made wholly of an elastic material excepting the sole. The ordinary rubber shoes, such as have been in use for more than twenty years, are of that nature. Such shoes have also been covered inside and outside with an extensible or non-extensible cloth. Nor do I wish to be understood to claim as new the uniting of an extensible and a non-extensible rubber fabric in a shoe by the act of vulcanization, as that has been practiced for many years; but

What I claim as new, and desire to secure

by Letters Patent, is—

1. A shoe, the sides and rear of which are made of one continuous piece of elastic extensible fabric surrounding the whole or the greater portion of the opening in the shoe through which the foot is inserted, the vamp or front being made of an inelastic material, substantially as and for the purposes shown and set forth.

2. A water-proof overshoe, whose quarter, extending around the rear and along the sides of the shoe, and surrounding the whole or a greater portion of the opening through which the foot is inserted, is of an elastic and extensible material, while the vamp or upper is made of a distinctively non-elastic and inextensible material, substantially as shown and

set forth.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

ELISHA S. CONVERSE.

Witnesses: GEO. M. HOBBS, EDW. AVERY.