

(No Model.)

E. N. DOUGLASS.
BATHING STOCKING.

No. 266,614.

Patented Oct. 31, 1882.

Fig. 1.

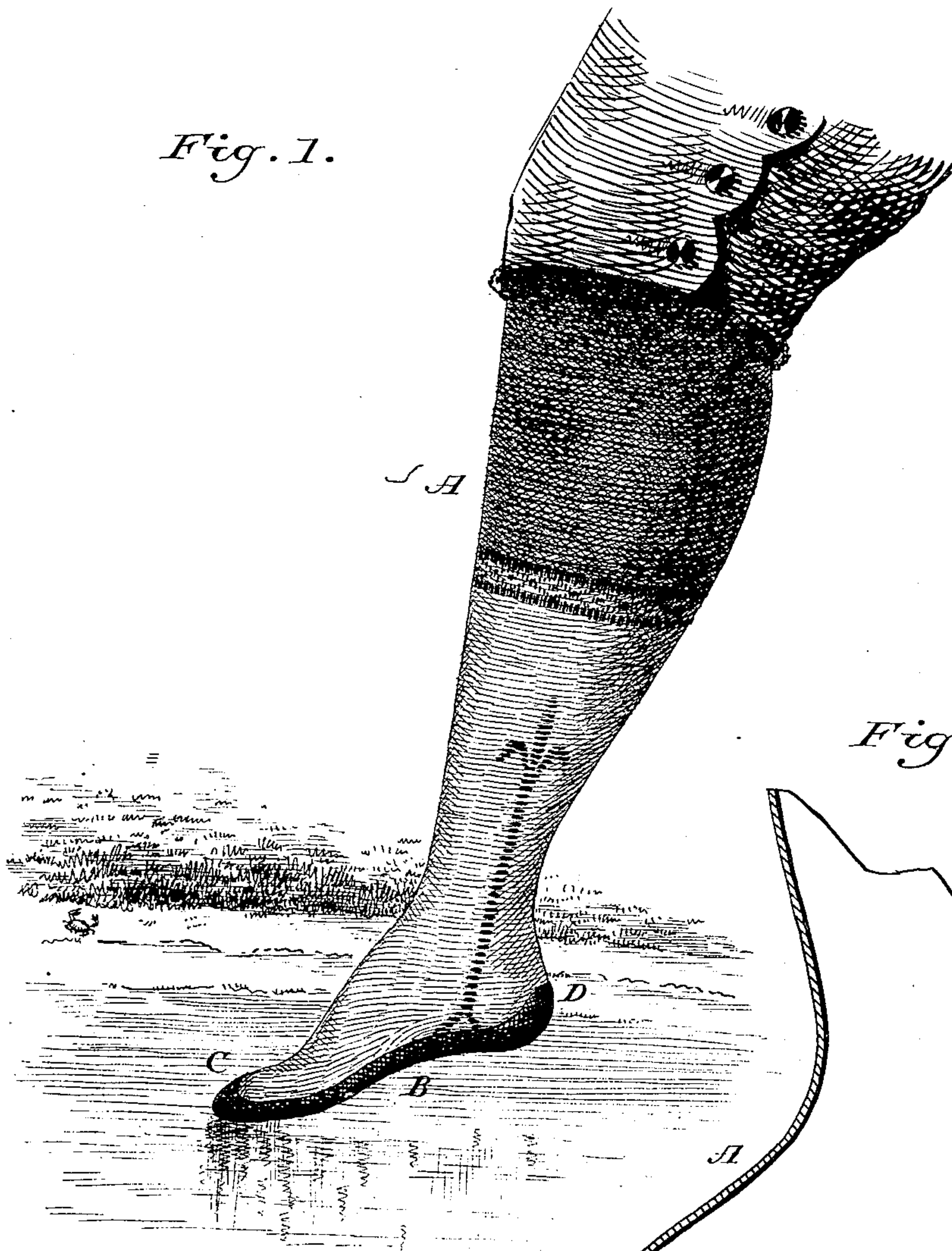
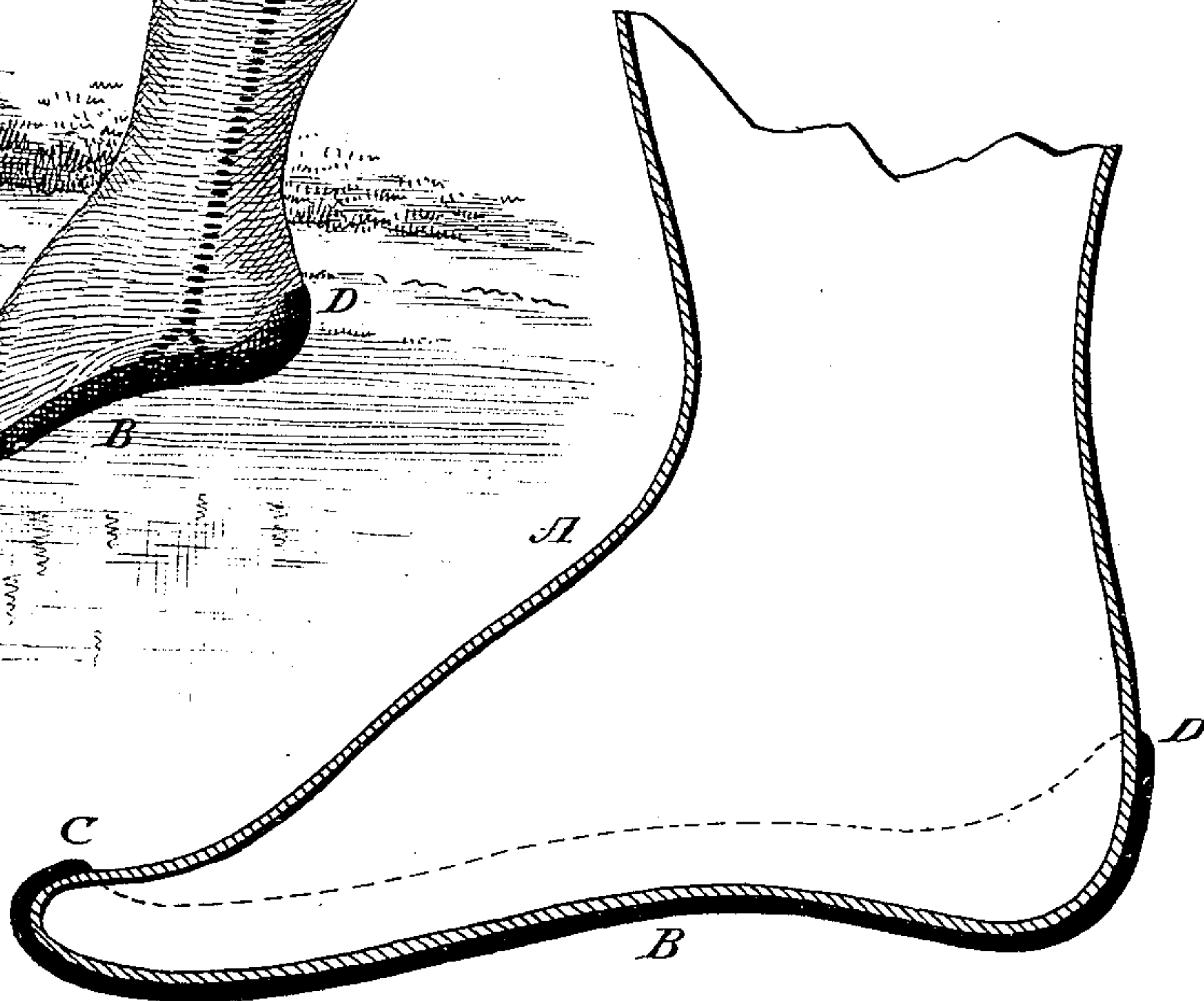


Fig. 2.



Witnesses:

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UNITED STATES PATENT OFFICE.

ELIZABETH N. DOUGLASS, OF WASHINGTON, DISTRICT OF COLUMBIA.

BATHING-STOCKING.

SPECIFICATION forming part of Letters Patent No. 266,614, dated October 31, 1882.

Application filed April 27, 1882. (No model.)

To all whom it may concern:

Be it known that I, ELIZABETH N. DOUGLASS, a citizen of the United States, residing in the city of Washington, in the District of Columbia, have invented a new and useful Improvement in Rubber Goods and Waterproofing, of which the following is a full, clear, and exact description.

This invention relates to that class of articles in which any textile, woven, or knitted fabric is covered with india-rubber or other pliable material not affected by water; and it consists of stockings made of any good, suitable, and substantial material, having the soles thereof and a portion of the sides of the foot covered with the materials in question, applied in the manner hereinafter set forth.

It is common at seaside resorts, where people congregate during the summer season for the purposes of enjoying the benefits of sea-bathing, to provide for themselves protection to the feet while bathing in the surf. This is rendered necessary by the injury resulting from bruises by small stones, pebbles, or gravels, abrasions by coarse sand, or even incisions by sea-shells, which often abound. It is also common to protect the feet and lower extremities by means of stockings; but these of themselves cannot be made sufficiently substantial either to withstand the severe wear to which they would be subjected, or protect the feet fully from the bruises and other injuries before mentioned. Heretofore the feet have been further protected by shoes or slippers made of canvas or other material; but they soon become filled with sand while the wearer is bathing, are very difficult to secure to the feet with firmness, and are otherwise exceedingly inconvenient.

The object of this invention is to remove all these difficulties, and to secure an article that will at the same time be efficient in protection, be no impediment in swimming or other exercise in bathing, be easily secured to the feet, and be tidy, neat, and graceful.

In carrying out my invention I take any kind of stocking or hose and apply to the bottom of the foot thereof by any suitable, convenient, and economical process a coating of india-rubber, the various materials employed in manufac-

ture of oil-cloths or other similar flexible or pliable materials not affected or dissolved by water. The material is so applied to the stocking that when it is drawn upon the foot the whole of the sole of the latter will be covered with it, and it will extend up the side for a convenient distance—say half an inch—being somewhat higher at the heel, and made to extend over the front sufficiently to partly cover the toes. This latter precaution will serve better to protect the toes and strengthen the stocking at a point where it is most likely to suffer injury from wear. The material applied must be sufficiently thick to provide the desired protection, and yet thin and pliable enough to adjust itself readily to the shape of the foot—say one-sixth to one-eighth inch. The stockings thus protected are worn as other stockings are, and secured to the foot in the usual manner. There can never be any inconvenience of getting sand within them about the feet, and they will always be easy and comfortable.

The form of the water-proof covering of the sole or bottom of the stocking and the manner of attaching it are shown in the annexed drawings, forming part of this specification.

Figure 1 represents a perspective view of the said stocking, and Fig. 2 a longitudinal vertical cross-section through the center of the foot of same.

A in Fig. 1 represents the stocking, and B the water-proof bottom or sole attached to it. At C the sole is made to simply rise over the end sufficient to cover the end of the toe for protection, as indicated, while at D it is made to rise at the heel to prevent the wear of the textile or woven fabric of the stocking. The position of the several parts is also shown in the cross-section, in which *a* represents the textile or knitted fabric of the stocking; *b*, the rubber or water-proof sole or bottom; *c*, the protecting extension for the toe, and *d* the protection for the heel.

I am aware that it is not new to apply india-rubber or other materials to cloth and wearing-apparel for the purpose of rendering them water-proof; but this is not what I desire to secure; and I am also aware that it is not new to combine a stocking with a rubber shoe to

be used for protection to the feet against wet; but the invention herein described is quite different, and is designed for a totally different purpose.

5 What I claim as my invention, and desire to secure by Letters Patent, is—

1. As a new article of manufacture, bathing stockings or hose which consist of ordinary stockings or hose to the soles or the bottoms
10 of the feet of which is applied india-rubber or other substantial and flexible water-proof material, substantially as described.

2. The method of applying india-rubber or other flexible and water-proof material to the

soles of stockings or hose, whereby the parts 15 so covered are rendered stronger and more durable, and may serve as a protection to the feet in sea-bathing or for other purposes, substantially as described.

3. The combination of a stocking or hose 20 with the sole or bottom of india-rubber or other flexible and water-proof material, for the purposes substantially as described.

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Witnesses:

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