

No. 745,792.

PATENTED DEC. 1, 1903.

W. C. CORMAN.

ELASTIC TAP FOR SOLES OF BOOTS OR SHOES.

APPLICATION FILED JULY 16, 1902.

NO MODEL.

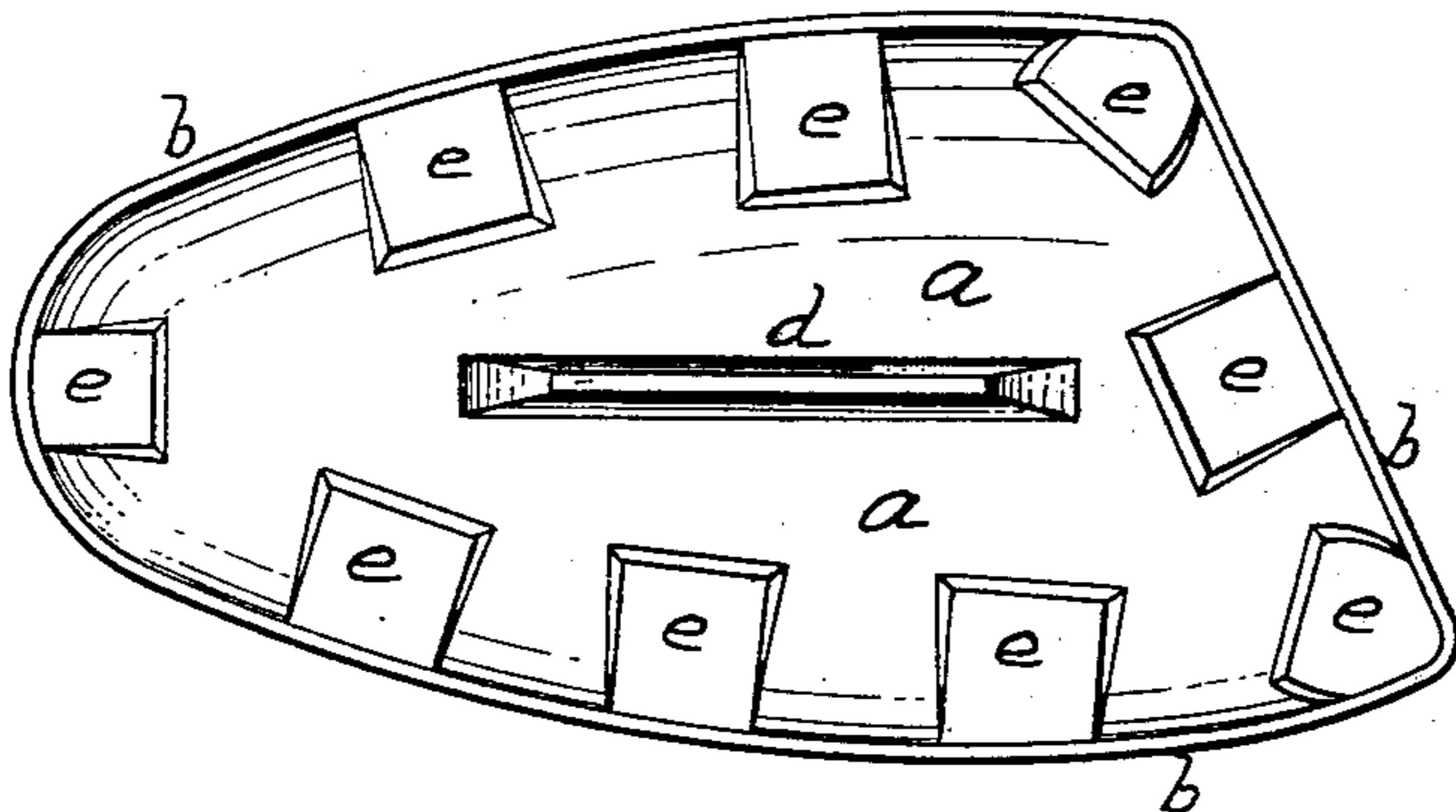


Fig. 1.

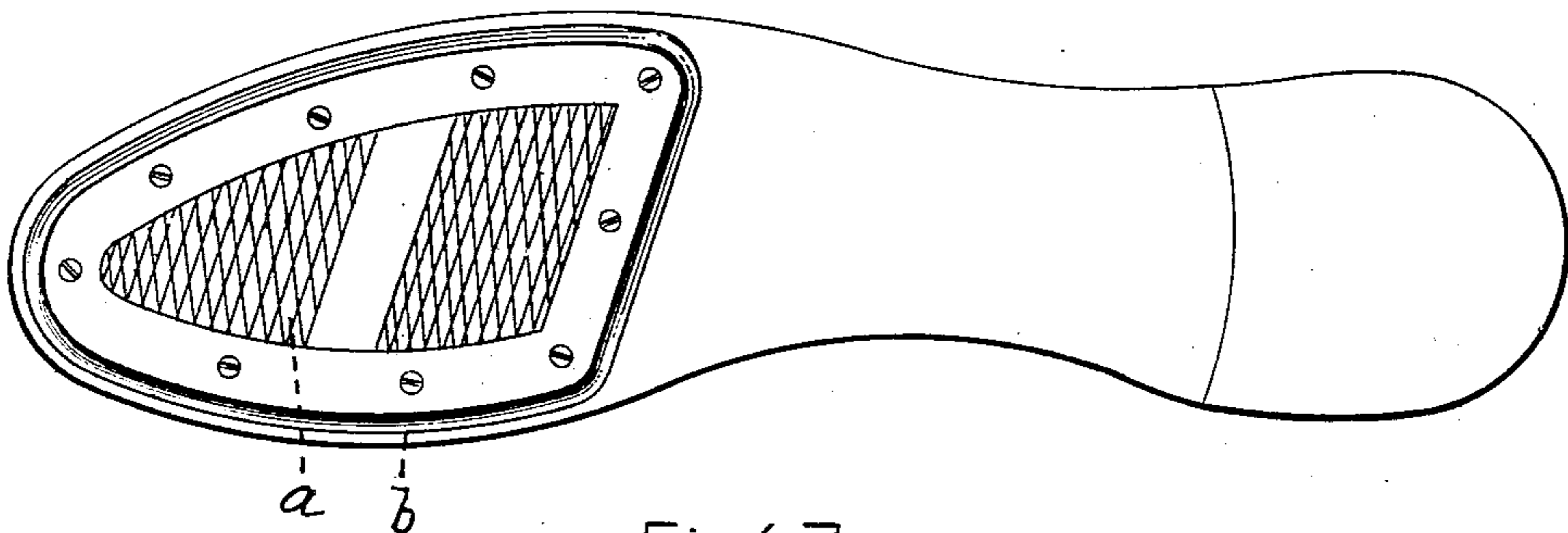


Fig. 2.

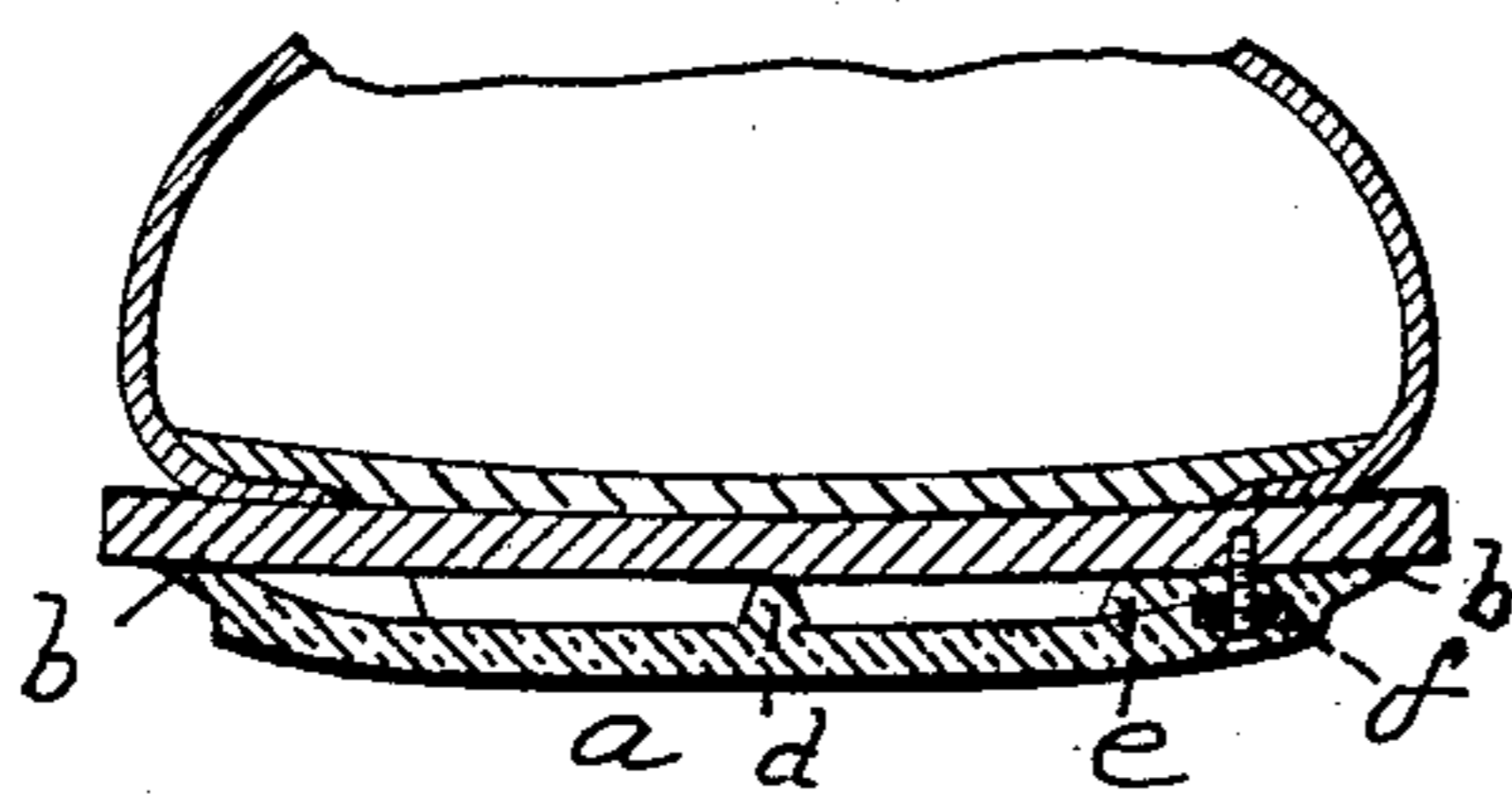


Fig. 3.

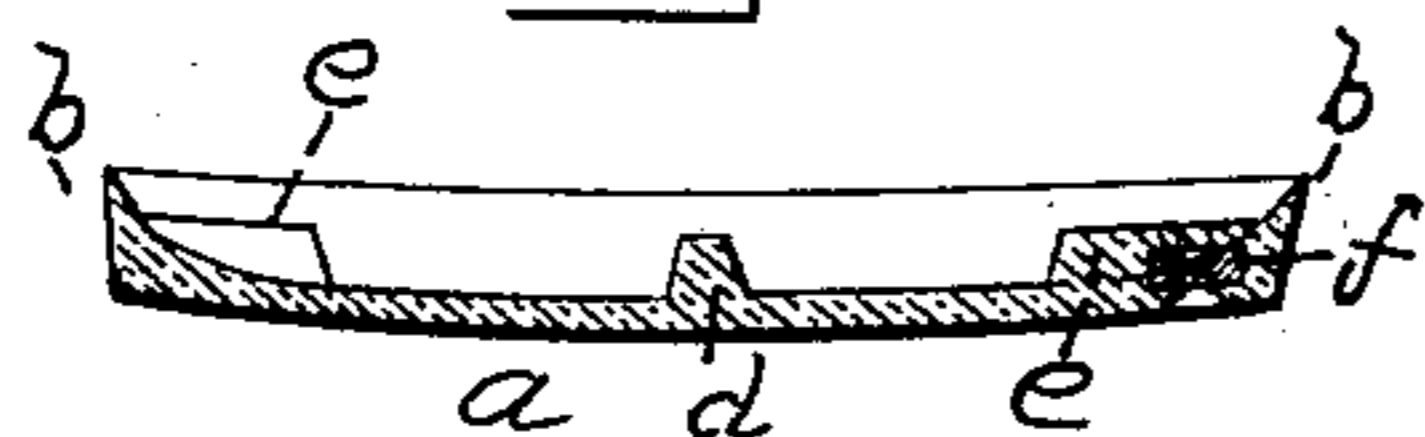


Fig. 4.

WITNESSES:

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# UNITED STATES PATENT OFFICE.

WILLIAM C. CORMAN, OF ROCHESTER, NEW HAMPSHIRE.

## ELASTIC TAP FOR SOLES OF BOOTS OR SHOES.

SPECIFICATION forming part of Letters Patent No. 745,792, dated December 1, 1903.

Application filed July 16, 1902. Serial No. 115,792. (No model.)

*To all whom it may concern:*

Be it known that I, WILLIAM C. CORMAN, a citizen of the United States, residing in Rochester, in the county of Strafford and State of New Hampshire, have invented new and useful Improvements in Elastic Taps for Soles of Boots or Shoes, of which the following is a full, clear, and exact specification.

This invention relates to rubber taps adapted to be secured by screws or nails to the under or outer surface of the soles of boots or shoes, either by the consumer—that is to say, the wearer—or by a shoemaker.

The invention relates particularly to that class of elastic taps which may be termed “pneumatic,” being formed with a recess or chamber containing air, whereby the elasticity of the rubber is supplemented by an air-cushion.

The nature of the invention is fully described below, and illustrated in the accompanying drawings, in which—

Figure 1 is a plan view of the upper side—i. e., the side next the sole when in position—of my improved elastic tap. Fig. 2 is a plan view of the under side of a boot or shoe with my tap in position. Fig. 3 is a cross vertical section of a portion of a boot or shoe with my tap applied thereto. Fig. 4 is a cross section of the elastic tap removed.

Similar letters of reference indicate corresponding parts.

The tap is formed of an integral piece of rubber of suitable softness and elasticity. It is made somewhat smaller in area than the surface of the sole to which it is to be applied, and it consists of a concavo-convex main portion *a*, with its periphery or edge formed up into a substantially vertical lip or flange *b*, a central longitudinal supporting-rib *d*, and supporting-blocks *e*, extending up from the portion *a* and having flat tops of even height, said tops, however, being somewhat lower than the upper edge of the lip or flange when said lip or flange is in its normal position. The supporting-blocks *e* and the rib *d* are all integral with the tap, and the said supporting-blocks may be of any desired number and are located next the peripheral lip *b*.

In practical operation the pad is applied to the sole by means of screws or nails, (preferably screws,) as shown in Figs. 2 and 3. It is advisable to apply nuts, as *f*, to the screw-holes, said

nuts being provided during the process of vulcanization. Their use is not, however, new in this invention. When the tap is secured tightly to the sole, the lip or flange *b* is flattened outward against the under side of the sole and the weight of the body is supported by the blocks *e* and the central rib *d*. The flattened lip or flange makes a broad and air-tight joint, and thus provides an air-cushion in the chamber between the portion *a* and the sole. As the wearer walks the somewhat downwardly-protruding concavo-convex portion *a* is pressed up until the sole rests firmly on the blocks *e* and rib *d*, and thus the air-cushion is brought into use, so that the elasticity of the rubber is supplemented by that of the air-cushion and both are utilized. The tap is intended to be somewhat smaller in area than the sole to which it is to be secured in order that the flange can be pressed and spread outward without extending beyond the edge of the sole, and it is evident that the tap may be applied or removed without the aid of a shoemaker.

Having thus fully described my invention, what I claim, and desire to secure by Letters Patent, is—

1. A rubber sole for boots and shoes comprising a concavo-convex body portion having a surrounding flange, and blocks rising from the concave surface and extending at suitable distances apart around the same, and a central longitudinal rib having inclined sides and end portions, said flange, blocks and rib being formed integral with the body portion, substantially as specified.

2. An elastic rubber tap for soles, comprising the substantially concavo-convex main portion *a*, supporting-blocks extending up from said main portion near its periphery, a central longitudinal rib extending up from said portion, said blocks and rib being of substantially even height, and a peripheral lip or flange *b* extending normally up from the main portion at its edge to a height somewhat above the blocks and rib, substantially as described.

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

WILLIAM C. CORMAN.

Witnesses:

WILLIAM DELANEY,  
JOHN M. HANSON.