

(No Model.)

J. W. PACKARD.
BOX TOE.

No. 503,614.

Patented Aug. 22, 1893.

FIG. 1.

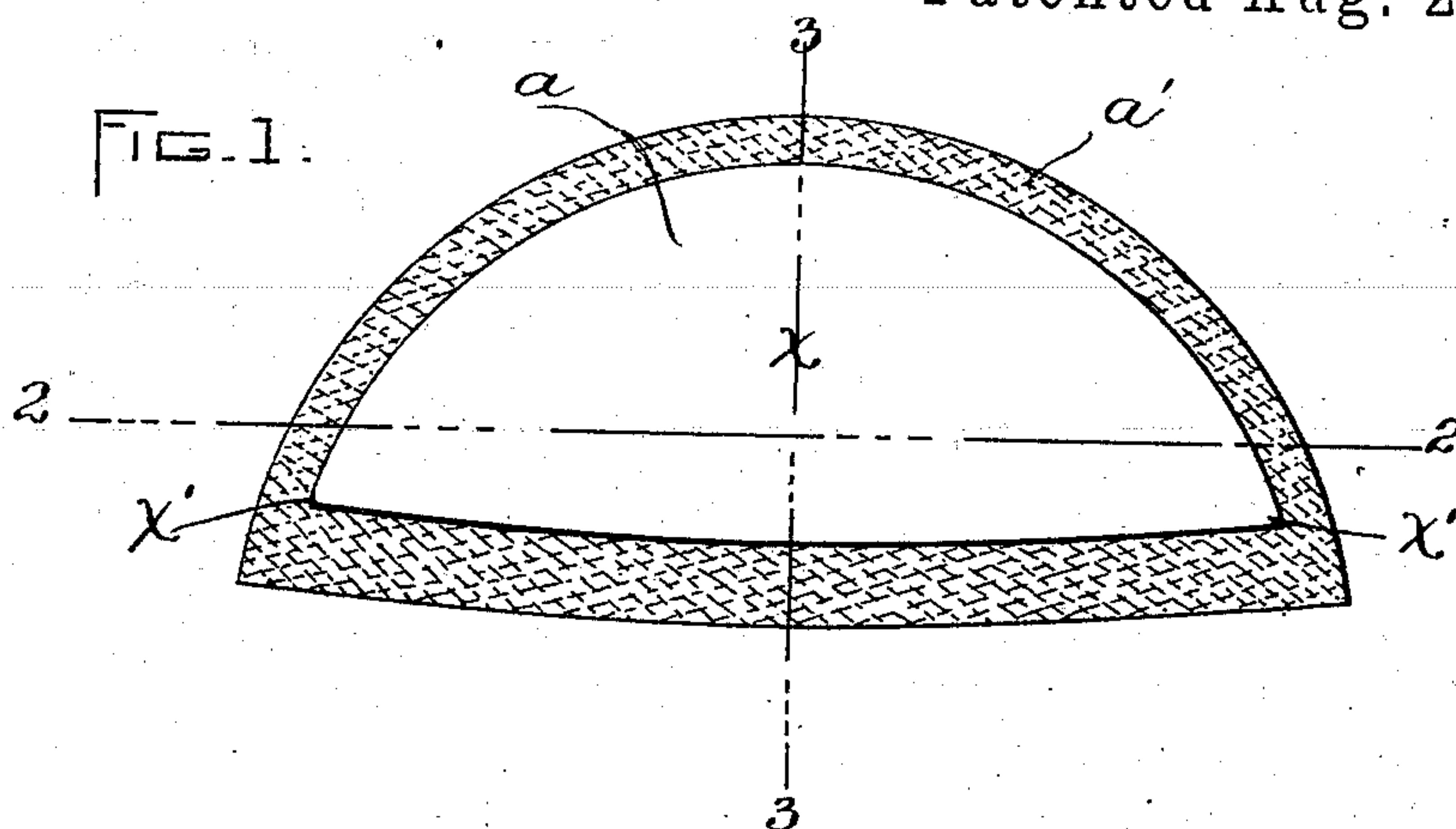


FIG. 2.

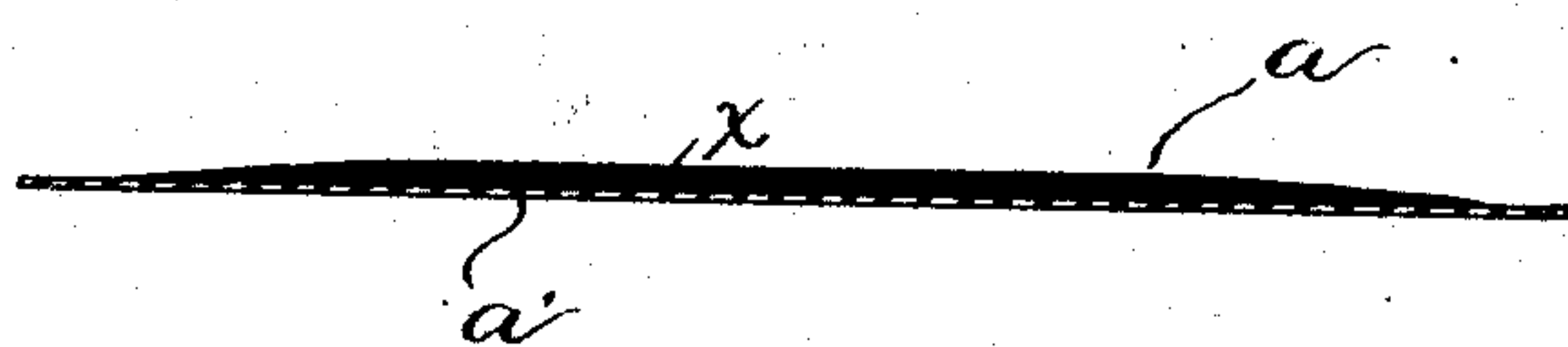


FIG. 3.

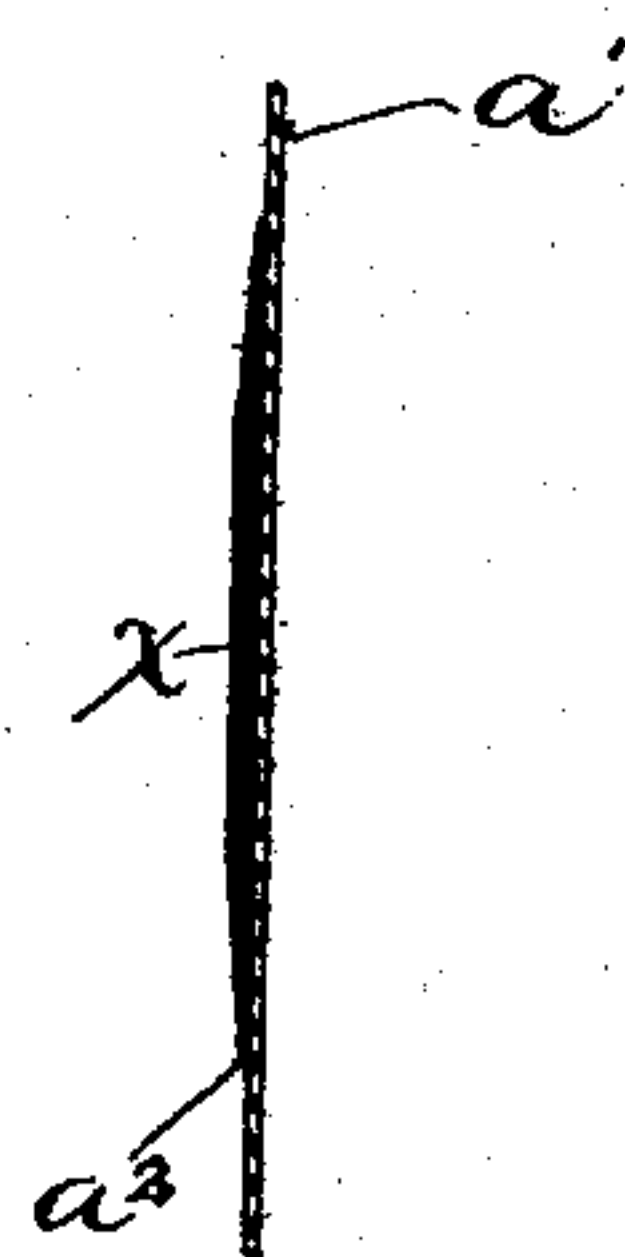
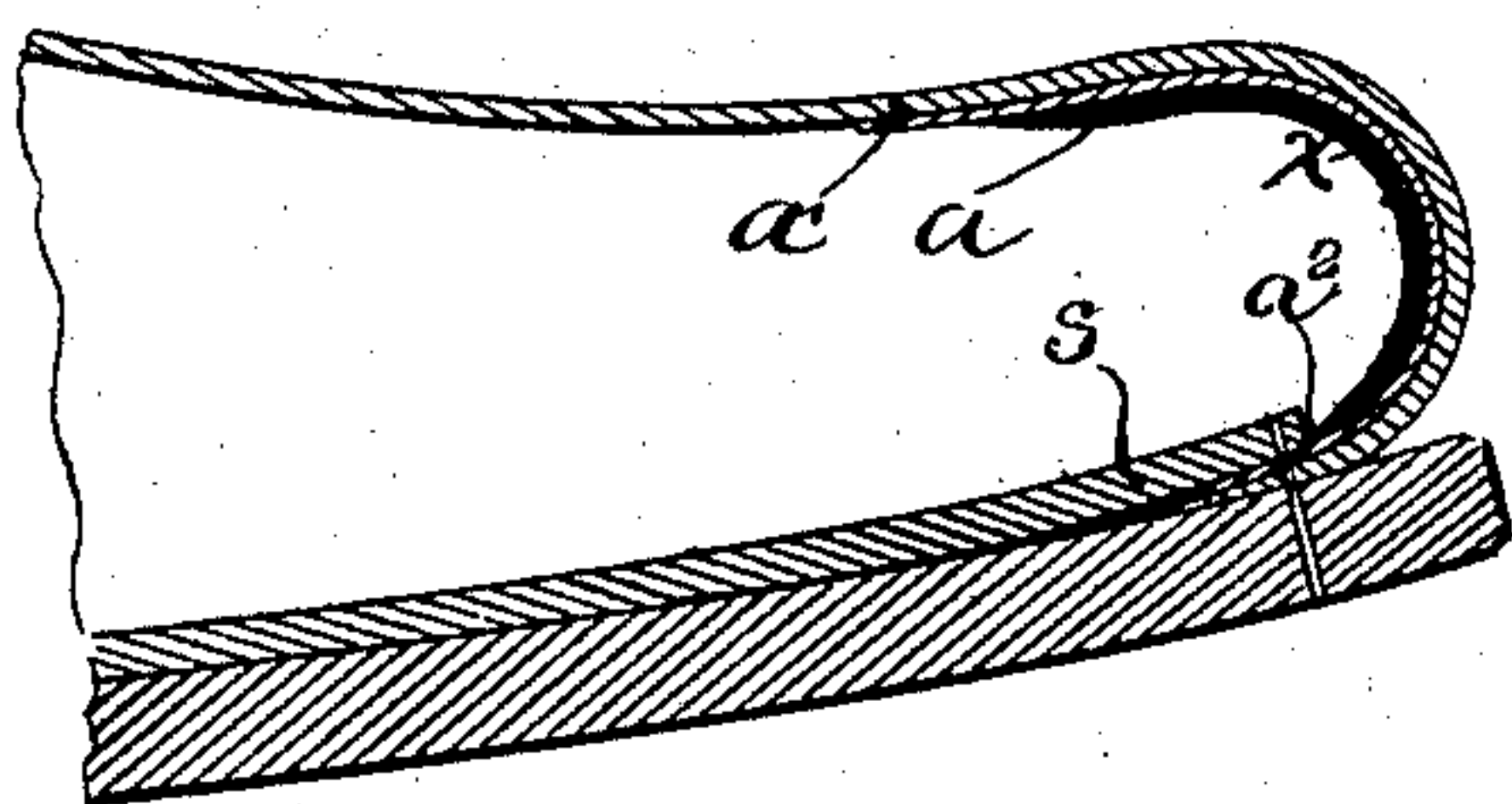


FIG. 4.



WITNESSES:

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UNITED STATES PATENT OFFICE.

JAMES W. PACKARD, OF BROCKTON, ASSIGNOR OF ONE-HALF TO THE BOUVÉ,
CRAWFORD & COMPANY CORPORATION, OF BOSTON, MASSACHUSETTS.

BOX-TOE.

SPECIFICATION forming part of Letters Patent No. 503,614, dated August 22, 1893.

Application filed December 5, 1892. Serial No. 454,108. (No model.)

To all whom it may concern:

Be it known that I, JAMES W. PACKARD, of Brockton, in the county of Plymouth and State of Massachusetts, have invented certain
5 new and useful Improvements in Box-Toes for Boots and Shoes, of which the following is a specification.

This invention relates to the blanks or pieces which are used to stiffen and impart a per-
10 manent form to the toes of boot and shoe uppers, and it has for its object to provide an improved blank or box toe piece, which shall afford the upper of the boot or shoe the de-
15 sired support at the prominent portion of the curve of the box toe, without being unduly thick and prominent at the marginal portions.

The invention consists in a box toe blank composed of an elastic rubber body portion decreasing in thickness in all directions from
20 its central portion to its margin and a cloth backing piece which is of greater area than the rubber body, the blank having a shoulder or rabbet near its lower edge formed to bear against the toe of the inner sole of a boot or
25 shoe.

Of the accompanying drawings, forming part of this specification—Figure 1 represents a plan view of my improved box toe blank. Fig. 2 represents a section on line 2 2, Fig. 1.
30 Fig. 3 represents a section on line 3 3, Fig. 1. Fig. 4 represents a longitudinal section of the toe portion of a boot or shoe into which my improved box toe has been incorporated.

The same letters of reference indicate the
35 same parts in all the figures.

In carrying out my invention, I form a box toe blank a , of substantially the outline in plan shown in Fig. 1, of rubber or a composition composed largely of rubber, the rubber
40 being suitably vulcanized, so that the blank is sufficiently firm to retain the shape imparted to it when it is incorporated in the boot or shoe, and is adapted to return to its proper form in case the upper is indented at
45 the toe portion by external pressure. The blank is made of varying thicknesses, its maximum thickness being at or about the portion marked x in the several figures of the draw-

ings, this portion being about midway between the corners $x' x'$ of the blank, the loca-
50 tion of the said portion of maximum thickness being such that, in the formed blank, the said portion is at the prominent or salient curve of the box toe, as shown in Fig. 4, and is there-
55 fore adapted to give the upper a very firm support at the point where such support is most needed. The blank is gradually reduced in thickness from the portion of maximum
60 thickness to the margin, the reduction being in all directions, so that the margin is brought down to a comparatively thin edge. By this form, the edges of the box toe are prevented from being objectionably prominent, both
65 where they are united to the sole or bottom of the shoe and to the upper. I prefer to provide the rubber blank or body a with a cloth
70 backing a' which is of the same general form in outline as the said body but is of larger area, its margin projecting all around the body a as shown in Fig. 1. The rubber body
75 is cemented or otherwise secured to the backing a' . The margin of the rubber body forms a shoulder a^2 (Fig. 4) extending along the lower edge of the blank or that edge which is at-
80 tached to the sole of the boot or shoe, said shoulder abutting against the edge of the inner sole s .

I claim—

As an improved article of manufacture, a box toe blank, composed of a backing-piece
80 and a flat elastic body or piece centrally thickened and gradually decreased in thickness in all directions from said central portion to-
85 ward its edges, said blank being provided with a shoulder or rabbet a^2 near its lower edge formed to bear against the toe of the inner sole of a boot or shoe, as set forth.

In testimony whereof I have signed my name to this specification, in the presence of two subscribing witnesses, this 11th day of
90 April, A. D. 1892.

JAMES W. PACKARD.

Witnesses:

FLORENTINE L. STONE,
WILLIAM A. JONES.