

No. 871,309.

PATENTED NOV. 19, 1907.

J. H. VINTON.

METALLIC PROTECTOR FOR THE HEELS OR SOLES OF BOOTS AND SHOES.

APPLICATION FILED JULY 15, 1907.

Fig. 1.

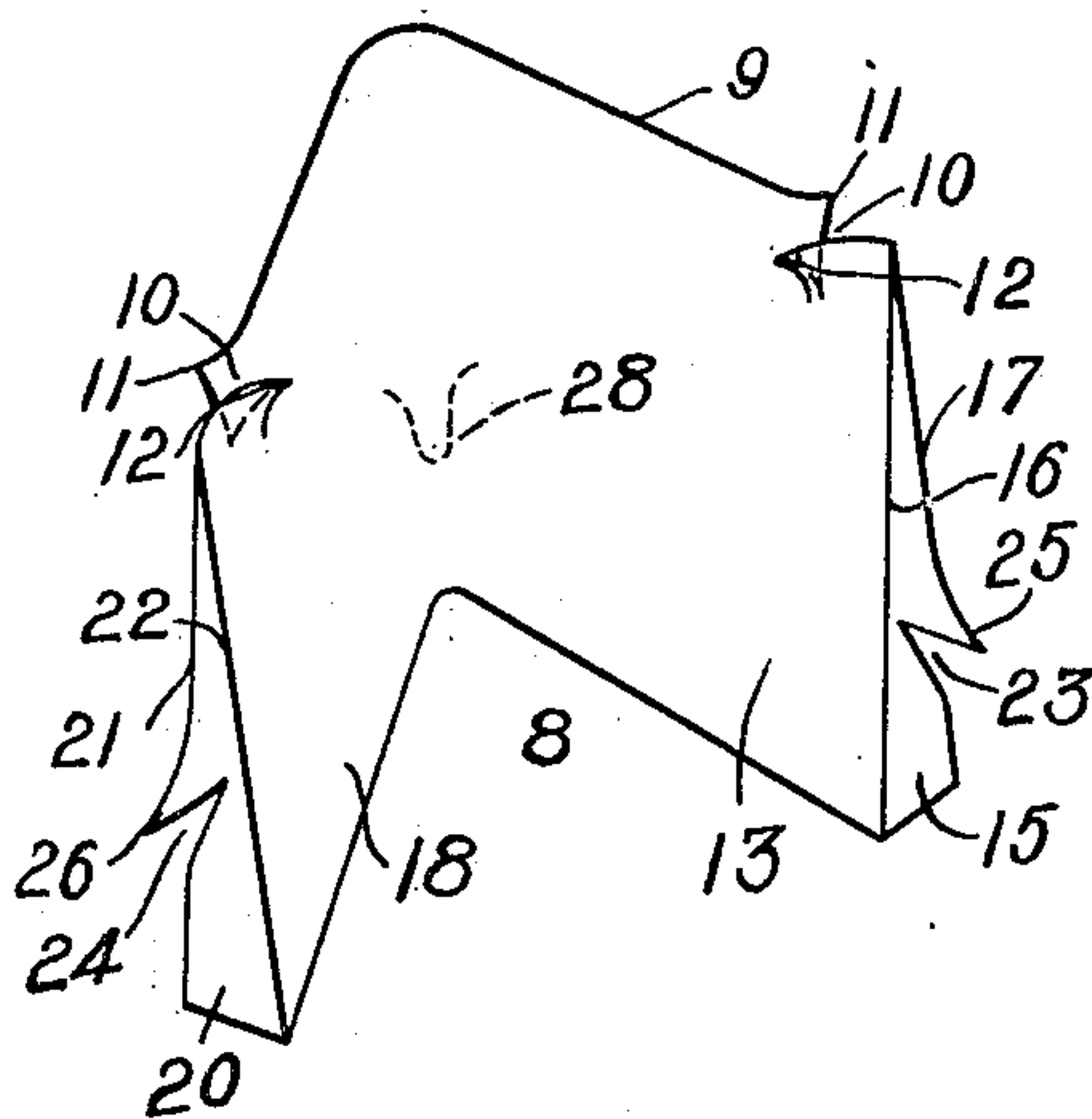


Fig. 2.

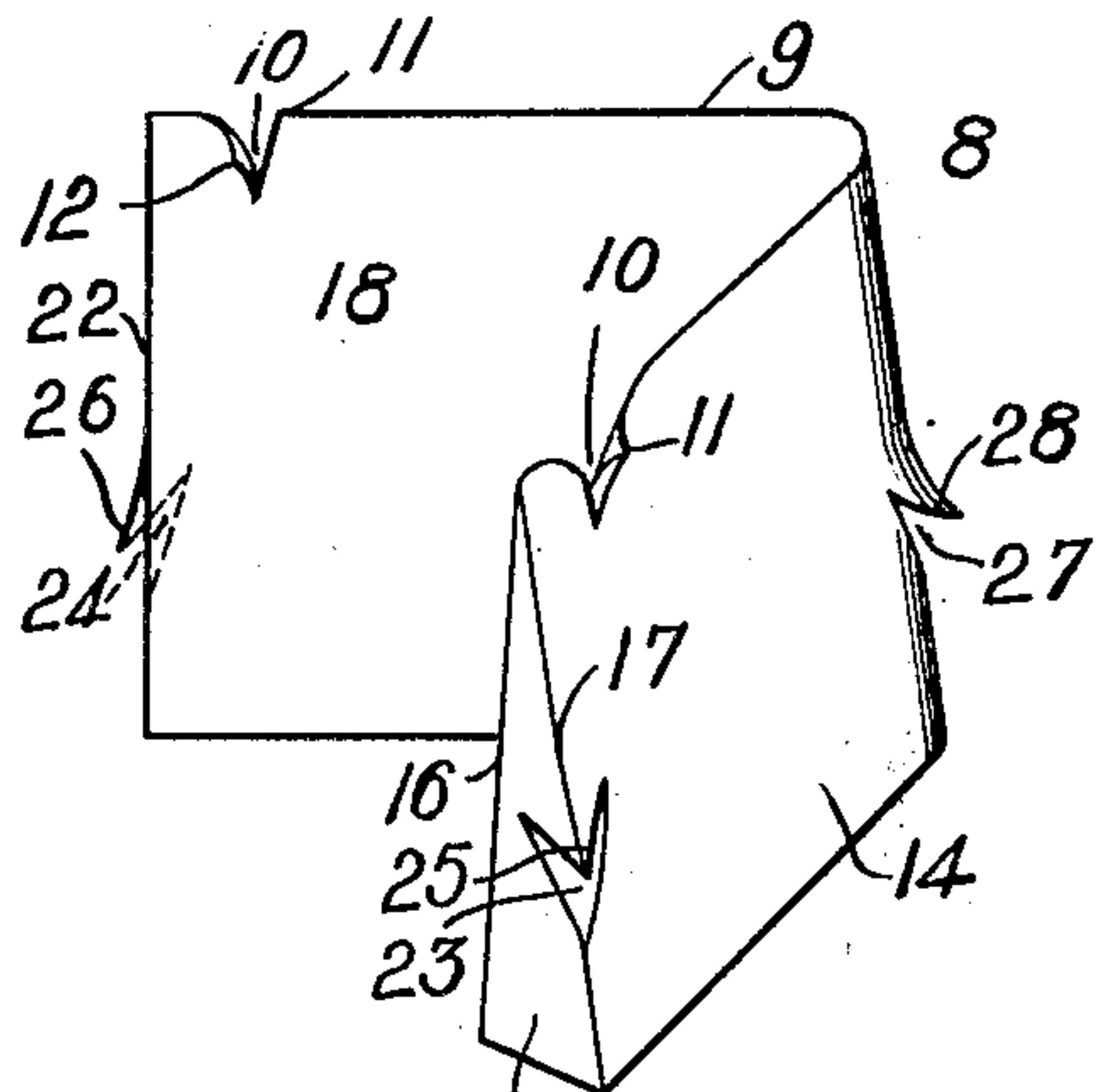


Fig. 3.

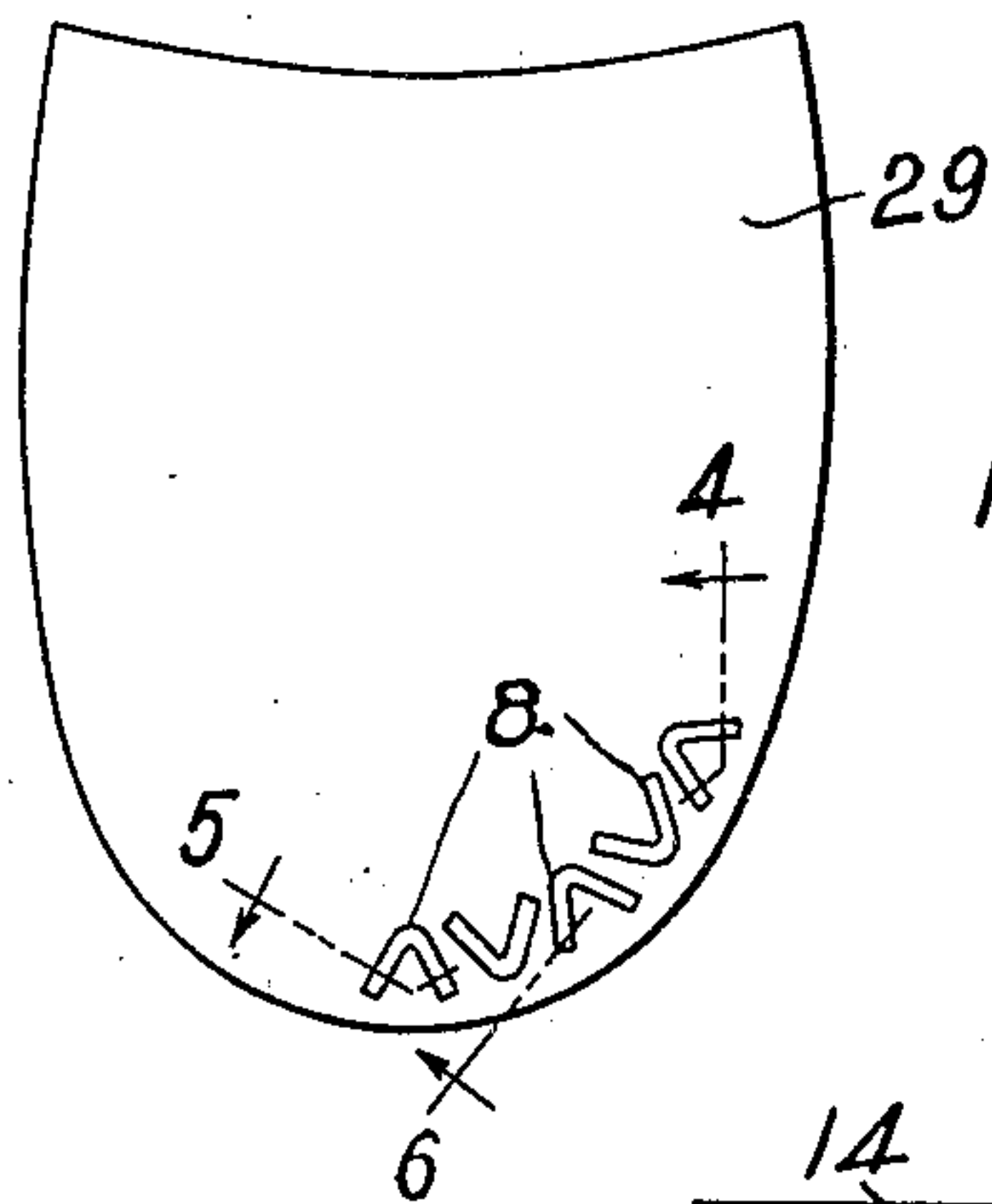


Fig. 4.

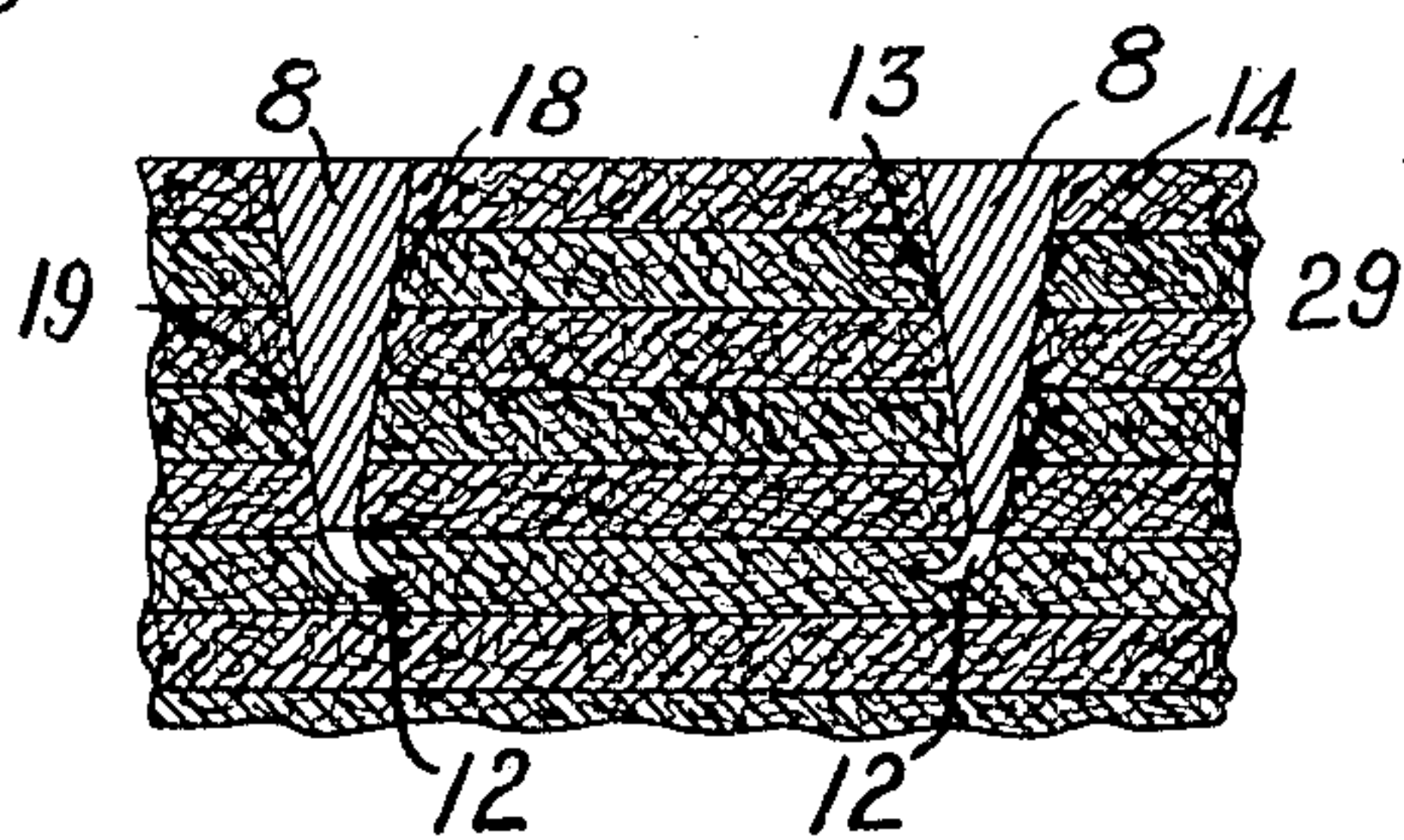


Fig. 5.

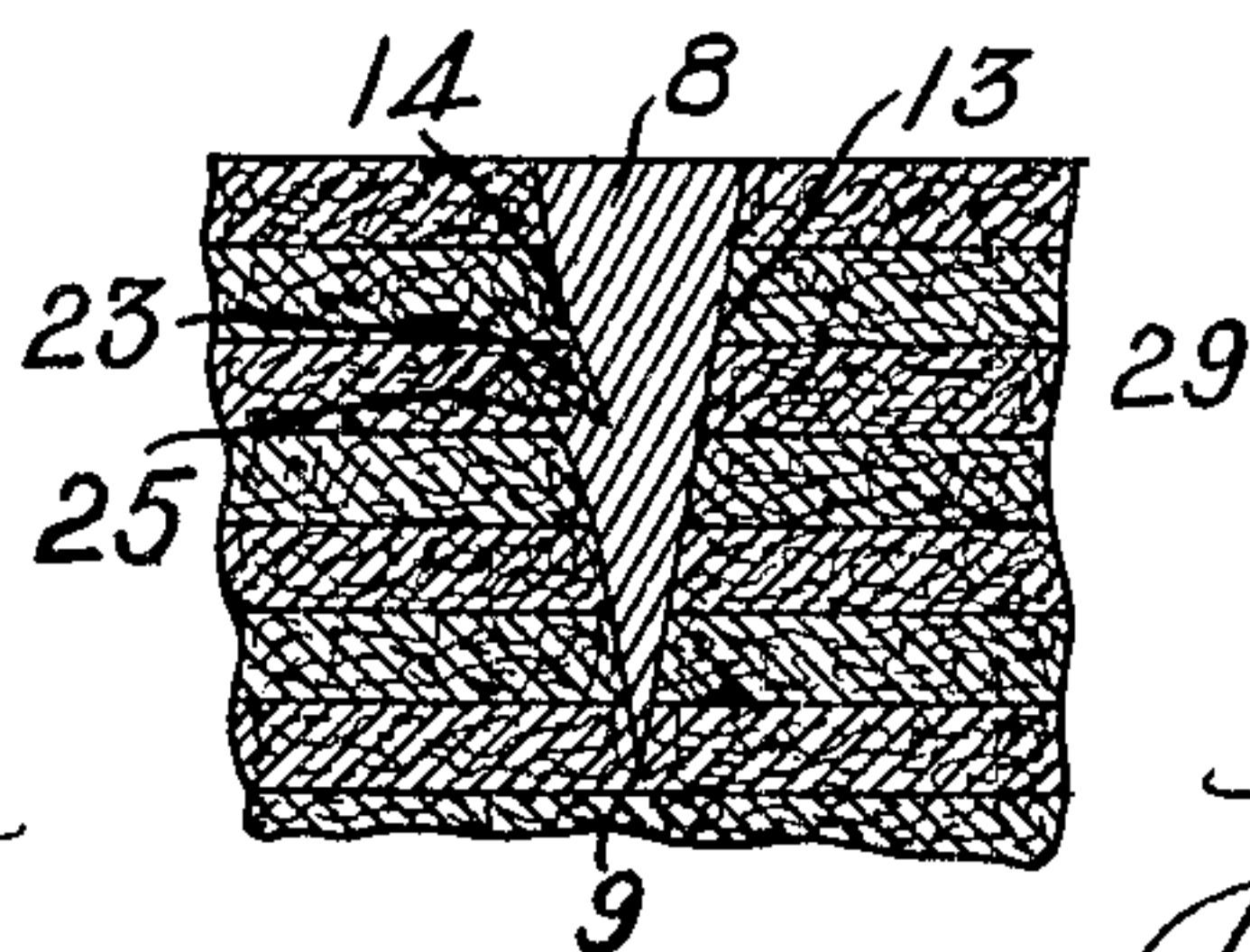


Fig. 6.

Witnesses:

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Ernest A. Telfer

Inventor:

John H. Vinton  
by his attorney  
Charles S. Gooding.



# UNITED STATES PATENT OFFICE.

JOHN H. VINTON, OF BOSTON, MASSACHUSETTS.

METALLIC PROTECTOR FOR THE HEELS OR SOLES OF BOOTS AND SHOES.

No. 871,309.

Specification of Letters Patent.

Patented Nov. 19, 1907.

Application filed July 15, 1907. Serial No. 383,873.

*To all whom it may concern:*

Be it known that I, JOHN H. VINTON, a citizen of the United States, residing at Boston, in the county of Suffolk and State of Massachusetts, have invented new and useful Improvements in Metallic Protectors for the Heels or Soles of Boots and Shoes, (Case C,) of which the following is a specification.

This invention relates to a protector for the heels or soles of boots and shoes, the same being formed from a strip of metal which is preferably wedge-shaped in cross section and bent to form a V and has a cutting edge so that the protector may be driven into the heel or sole of a boot or shoe to increase the wearing qualities of said heel or sole and also to prevent slipping. These protectors are preferably made V-shaped by bending the strip of metal into such form before the same is driven into the shoe, and in driving them into the heel they are preferably driven alternately in opposite directions—that is, with the V portion projecting toward the center of the sole or heel in one case and toward the outer edge of the sole or heel in the other case, or with one-half the protectors driven into the sole or heel with the apex of the V pointing toward the central portion of said sole or heel, the other half of said protectors being driven into the sole or heel with the apex of the V pointing toward the outer edge of the sole or heel.

The object of the invention is to provide a protector of the character set forth which is so constructed that when it is driven into the sole or heel of a boot or shoe certain portions of it will be forced outwardly at an angle from the protector into the leather or rubber of the heel or sole in such a manner as to effectually prevent said protector from becoming detached from the sole or heel into which it is driven.

To this end the invention consists in a strip of metal wedge-shaped in cross section, bent to form a V and having a cutting edge, said strip of metal having one or more cuts in one or more of its edges, whereby the metal adjacent to said cuts is forced beyond the face of said metal strip to form barbs.

Referring to the drawings: Figure 1 is an enlarged perspective view of my improved protector with the cutting edge uppermost. Fig. 2 is another enlarged perspective view of the same. Fig. 3 is a plan view of a heel with some of my protectors driven therein. Fig. 4 is an enlarged section taken on line 4

of Fig. 3, looking in the direction of the arrow on said line. Fig. 5 is an enlarged section on line 5 of Fig. 3 looking in the direction of the arrow on the same. Fig. 6 is an enlarged section taken on line 6 of Fig. 3, looking in the direction of the arrow on said line.

Like numerals refer to like parts throughout the several views of the drawings.

In the drawings, 8 is the protector formed of a piece of wedge-shaped metal having a cutting edge 9 and bent in the form of a V. The protector has cuts 10, 10 extending from the cutting edge thereof toward its thickest portion longitudinally of the protector and transversely of the strip. The cuts 10, 10 are so made as to turn out a portion of the metal at one side of said cut and turn in a portion of the metal on the other side of said cut to form barbs 11 and 12, respectively.

The inner and outer faces 13 and 14 of the protector intersect the end face 15 thereof in the lines 16 and 17, respectively, said lines 16 and 17 constituting two edges of the protector. The inner and outer faces 18 and 19 intersect the end face 20 in lines 21 and 22, respectively, also constituting edges of said protector. Cuts 23 and 24 are made in the edges 17 and 21, respectively, which extend at an angle from the thicker portion of the protector toward the cutting edge 9 and these cuts bend the metal adjacent thereto and between said cuts and the cutting edge 9 outwardly to form barbs 25 and 26, respectively. Another cut 27, similar to the cuts 23 and 24, is made at the apex end of the protector where the outer faces 14 and 19 adjoin, said cut 27 bending the metal in said faces outwardly to form a barb 28.

When the protector is driven into the heel or sole of the shoe, the barbs 11 and 12 are curled outwardly and inwardly therefrom, as illustrated in Figs. 4 and 5, forming hooks to effectually prevent the protector from being withdrawn or accidentally removed from the sole or heel of the boot. The barbs 25, 26 and 28, while they are not curled outwardly to any greater extent than before they are driven into the shoe, are formed at such an angle that they readily enter the leather to prevent the protector from being withdrawn from the leather, as particularly illustrated in Fig. 6.

In Fig. 3 the preferred arrangement of the protectors as they are driven into the heel of a shoe is illustrated, said arrangement being substantially the same as that forming



the subject matter of a co-pending application made by me Serial No. 340,623, filed Oct. 26, 1906.

In manufacturing my improved protector the metal is preferably fed in the form of a strip into the machine which is to drive the completed protector. A piece is then cut from the end of said strip and bent between suitable V-shaped male and female dies to form a V. While the V-shaped protector is gripped between the dies the cuts 10, 10, 23, 24 and 27 are made therein, and finally the dies are released and the protector driven in the boot or shoe.

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

1. A metallic protector for the heels or soles of boots and shoes comprising a strip of metal wedge-shaped in cross section and having a cutting edge, said strip bent transversely thereof to form a V and having a cut extending longitudinally of said protector from said cutting edge.

2. A metallic protector for the heels or soles of boots and shoes comprising a strip of metal wedge-shaped in cross section and having a cutting edge, said strip bent transversely thereof to form a V and having a cut extending longitudinally of said protector from said cutting edge, the metal upon opposite sides

of said cut being turned outwardly and inwardly from the outer and inner faces of said protector, respectively, and forming barbs.

3. A metallic protector for the heels or soles of boots and shoes comprising a strip of metal wedge-shaped in cross section and having a cutting edge, said strip bent transversely thereof to form a V and having a cut in one of its edges extending longitudinally of said protector, whereby a portion of said metal adjacent to said cut is forced outwardly beyond the face of said metal to form a barb.

4. A metallic protector for the heels or soles of boots and shoes comprising a strip of metal wedge-shaped in cross section and having a cutting edge, said strip bent transversely thereof to form a V said protector having a plurality of edges formed by the intersection of two faces at an angle to each other and a plurality of cuts in said edges and extending into said faces, whereby the metal adjacent to said cuts is forced outwardly beyond said faces to form barbs.

In testimony whereof I have hereunto set my hand in presence of two subscribing witnesses.

JOHN H. VINTON.

Witnesses:

CHARLES S. GOODING,  
LOUIS A. JONES.