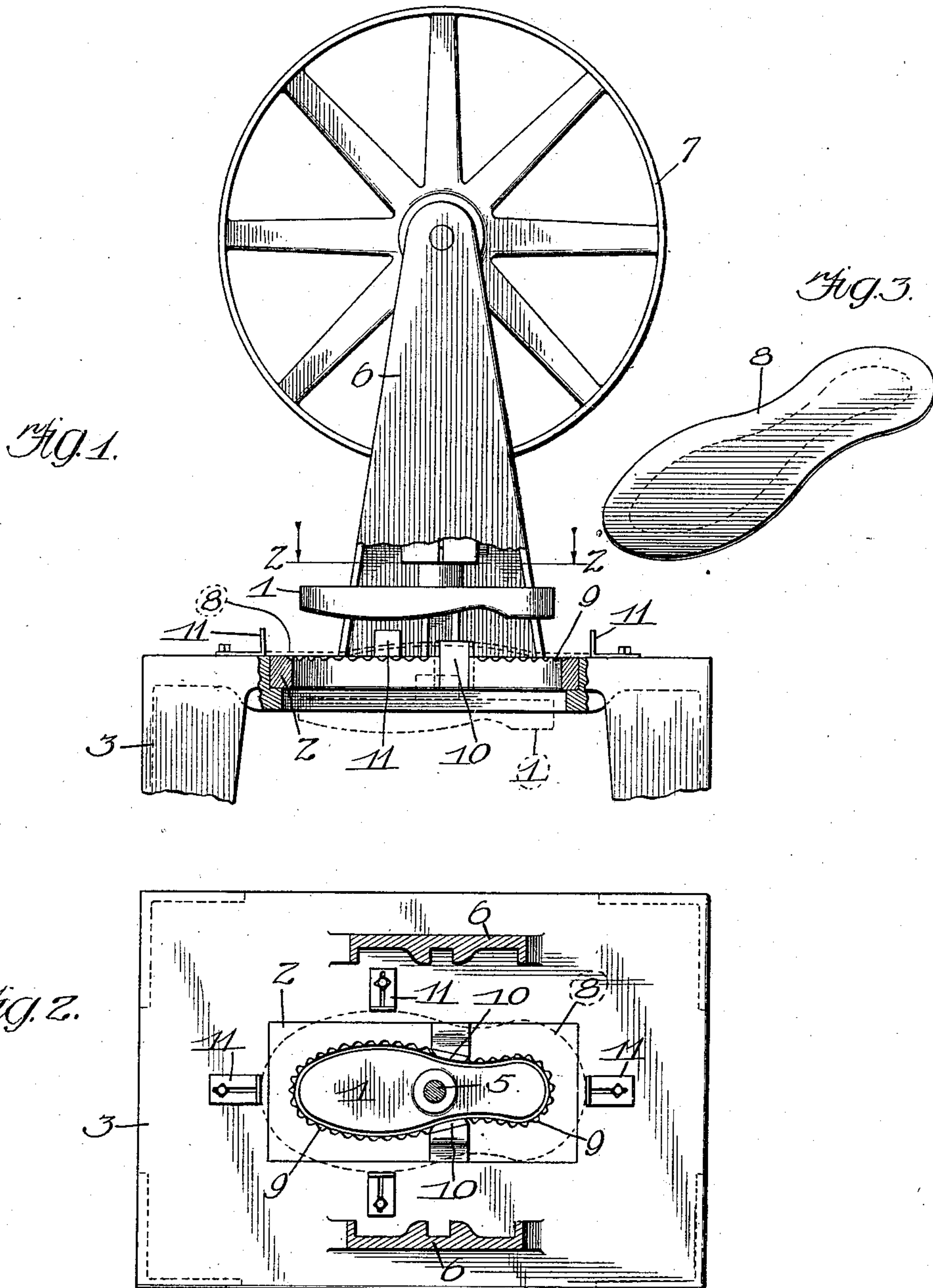


C. S. HUNTINGTON.  
 FOOTWEAR FORMER.  
 APPLICATION FILED MAR. 25, 1908.

966,551.

Patented Aug. 9, 1910.

2 SHEETS—SHEET 1.



Witnesses:  
*Ed. Perry*  
*Robert H. Weir*

Inventor:  
*Charles S. Huntington*  
 By *Hill & Hill*  
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2 SHEETS—SHEET 2.

Fig. 4.

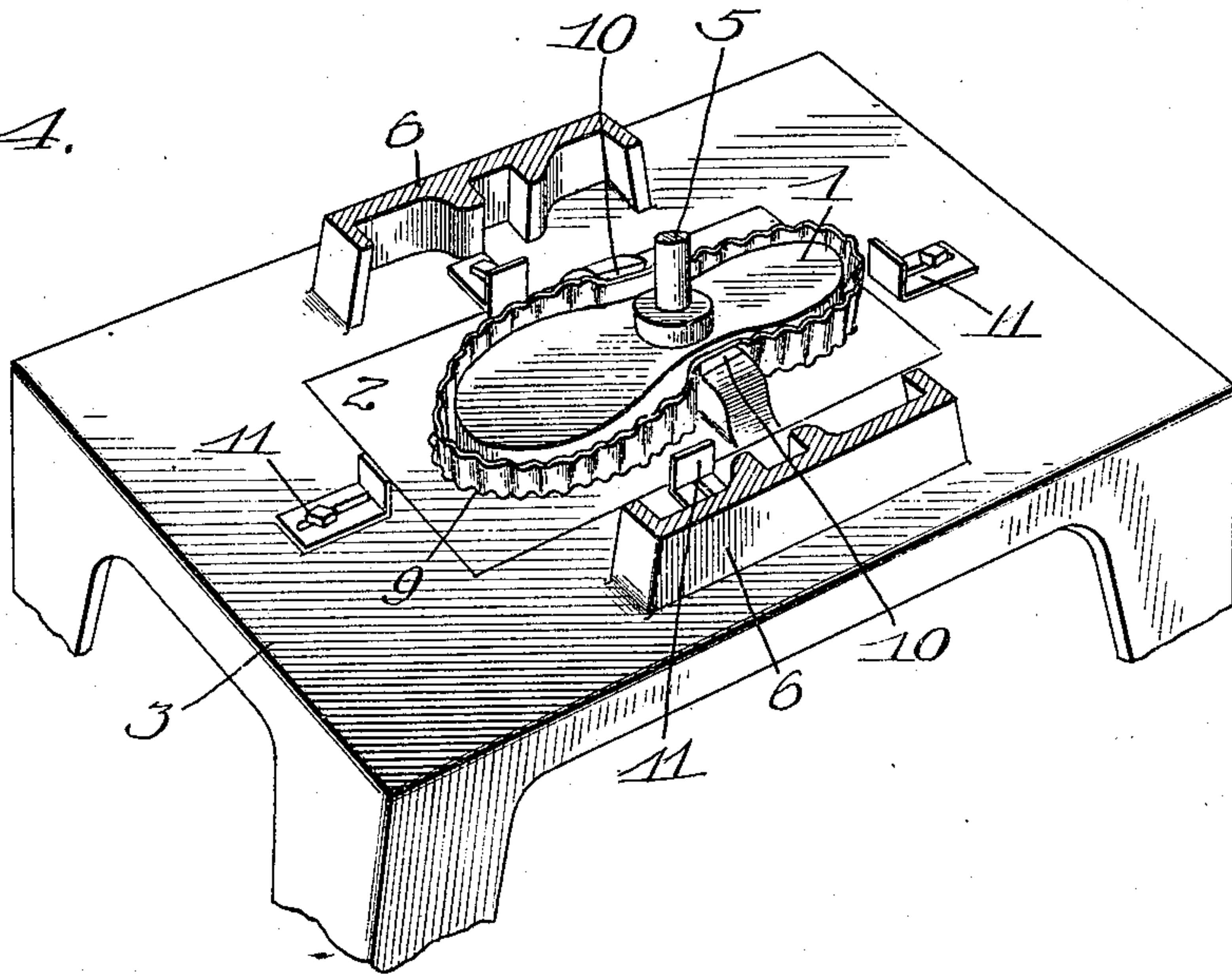


Fig. 5.

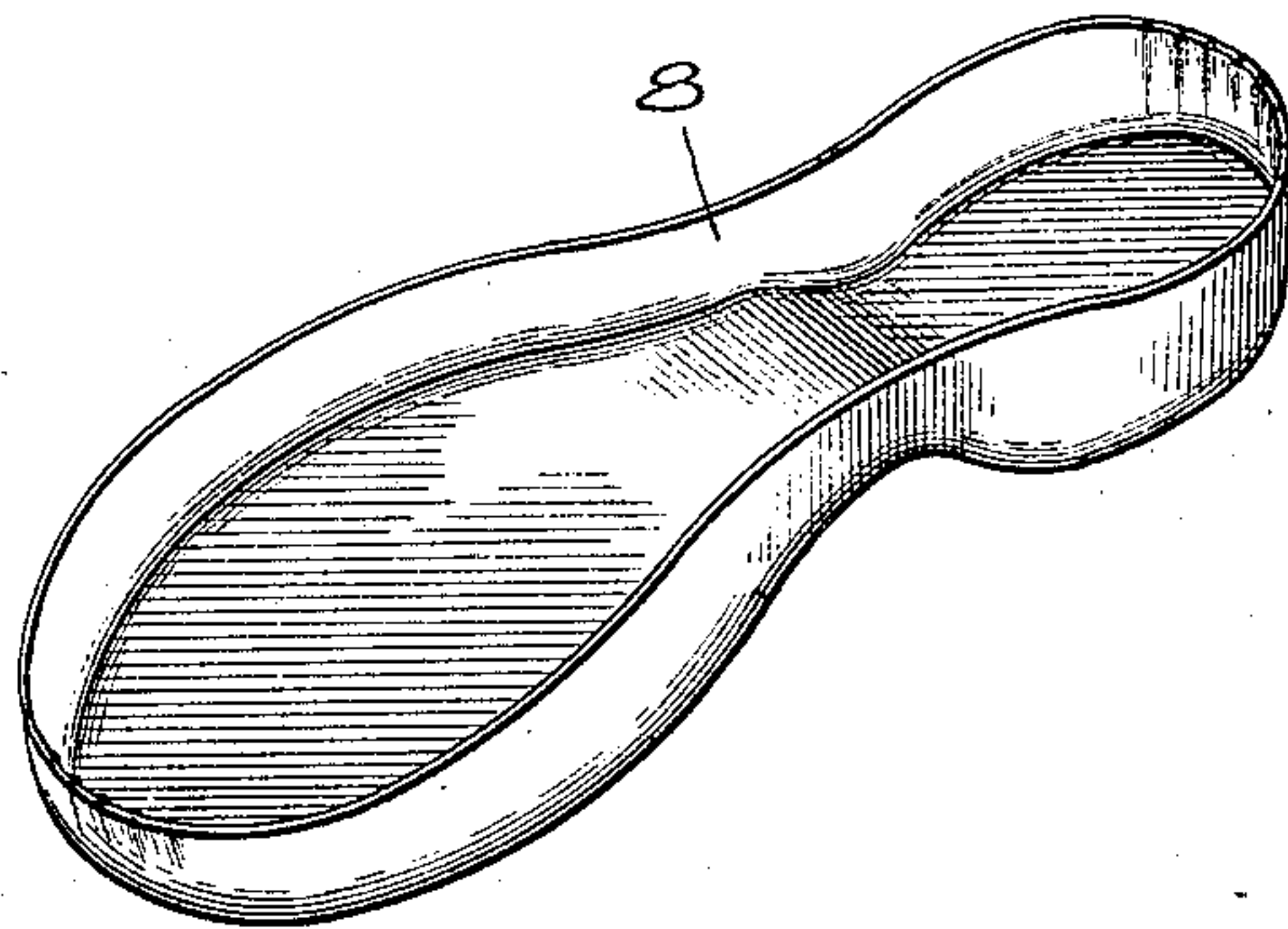
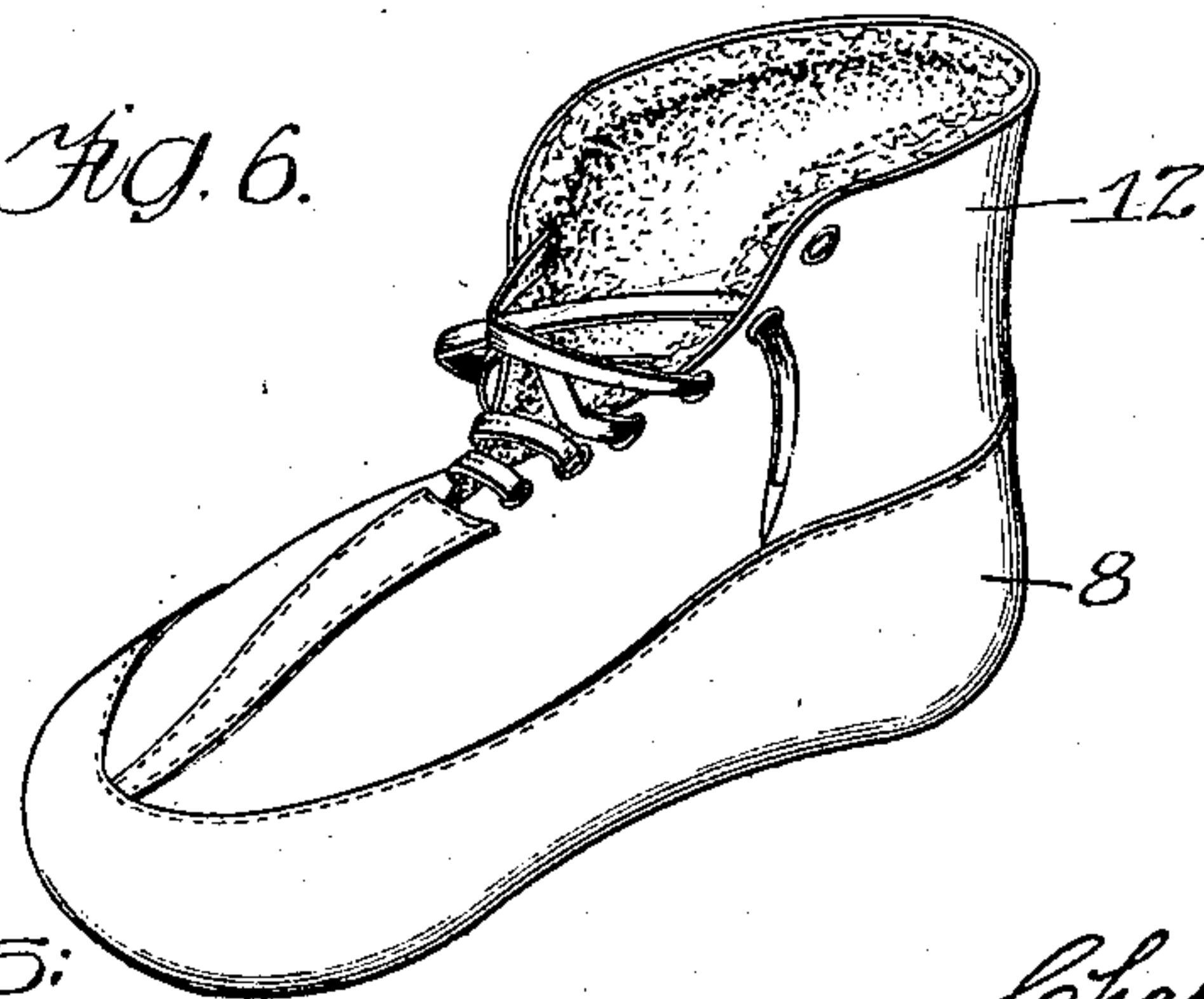


Fig. 6.



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# UNITED STATES PATENT OFFICE.

CHARLES S. HUNTINGTON, OF OMAHA, NEBRASKA, ASSIGNOR TO A. T. AUSTIN, OF OMAHA, NEBRASKA.

FOOTWEAR-FORMER.

966,551.

Specification of Letters Patent.

Patented Aug. 9, 1910.

Application filed March 25, 1908. Serial No. 423,076.

*To all whom it may concern:*

Be it known that I, CHARLES S. HUNTINGTON, a citizen of the United States, residing at Omaha, in the county of Douglas and State of Nebraska, have invented certain new and useful Improvements in Footwear-Formers or the Like, of which the following is a description.

My invention belongs to that general class of devices adapted to be used in the manufacture of footwear, particularly such as moccasins, hunting boots and the like, in which the vamp, quarter and sole are preferably formed integral and has for its objects the production of a more simple, efficient and satisfactory device and article shown and described.

To this end my invention consists in the novel construction, arrangement and combination of parts herein shown and described and more particularly pointed out in the claims.

In the drawings wherein like reference characters indicate like or corresponding parts, Figure 1, is a partial sectional view of my device, Fig. 2, is an elevation of the same taken substantially on line 2—2 of Fig. 1, Fig. 3, is a blank of the material to be formed, Fig. 4, is a partial perspective view showing the operation of the device or a step in forming the article, Fig. 5, is a perspective view of the blank as formed, and, Fig. 6, is a perspective view of the completed foot-wear.

Referring to the drawings in which my preferred form of device is shown, the same comprises what may be termed a last, form or former 1 and a suitable die 2 therefor. As shown the die 2 is provided with a bed 3, the die being preferably removable from the bed so that various styles or sizes of former 1 and die 2 therefor may be employed. As shown the die 2 is provided with an opening therein registering with the form or former 1, any suitable means being employed for reciprocating the die or the former relatively to each other when in use. As shown, the form 1 is adapted to be reciprocated relatively to the die 2 and is provided with an extending rod or bar 5 or the equivalent, which is connected to and operated by the press 6 (not shown in detail); 7 being a fly wheel or driving pulley for the press. As is obvious, any style of press, whether hand or power for reciprocating the form 1 may

be employed; hence I have not deemed it necessary to show the device or describe the press other than to say that the same is adapted in the construction shown to reciprocate the former 1 relatively to the die 2. As shown in Fig. 1, the form 1 is shown in its raised position and (in the dotted lines) in its position after it has passed through the die.

The purpose of my device is to form from a blank 8 similar to that shown in Fig. 3, into a formed product similar to that shown in Fig. 5 which is preferably an integral vamp, quarter and sole for foot-wear. This formed product is adapted to be used as the sole and also lower part of the foot-wear, for example, in moccasins, hunting boots and what is known as plow pacs or the like.

It is obvious that the material may be of any suitable kind, preferably leather of any desired or preferred kind, thickness or grade.

To form the blank into the finished product as shown in Fig. 5, it is placed between the die 2 and the form or former 1 as indicated in the dotted lines in Fig. 3 and the form 1 forced through the die giving the formed article, the same being without seams at the heel or toe or at other points.

It might be noted that the blank 8 preferably has oil, water or an equivalent applied thereto before the operation of forming the same; the amount of oil or water depending upon the grade and kind of leather. For instance, for certain kinds of light leather, water would be preferred or suitable; while for other kinds of leather, water would not be satisfactory and oil or its equivalent would be used. The amount of oil, water or the equivalent applied to the material blank would depend upon the quality or kind of leather used, which may be such as is desired or preferred.

As shown in the drawings, the face edges of the opening in the die are preferably fluted as shown at 9. As is obvious when the blank is forced through the die, there is a surplus of material around the edge of the blank which the fluted edges tend to gather in or crimp and distribute; any other equivalent means may be employed for the same purpose.

In the preferred construction, I preferably provide means for increasing the strain during forming at what is substantially a point in the material blank corresponding to the



hollow of the foot, thus raising or arching the sole somewhat at this point. This means preferably comprises members 10—10 or their equivalent arranged on each side adapted to contact with the blank to cause a strain between the same and the former, before the former enters the die proper. The members 10—10 also start the blank, turning up in the forming process. The members 10—10 are preferably made adjustable and removable so that they may be adjusted as desired or removed and others inserted.

Any suitable means may be employed to position the blank, as shown a number of adjustable stops or positioners 11 are shown on the bed 3 for the purpose.

Fig. 5 shows a completed moccasin, consisting of an upper secured to the finished form, giving a very substantial and practical moccasin.

Having thus described my invention, it is obvious that various immaterial modifications may be made in same or that other articles other than that shown and described may be formed in the manner set forth without departing from the spirit of my invention, hence I do not wish to be understood as limiting myself to the exact method or form, arrangement or combination of parts shown and described.

What I claim and desire to secure by Letters Patent is:

1. In a device of the kind described, a form in combination with a suitable die therefor provided with an opening therein substantially registering with the form and arranged to cooperate therewith to shape a sheet of material placed therebetween, means for reciprocating one of said members relatively to the other; a bed plate on which the die is loosely mounted, the bed plate having an opening for the protrusion of the form and adjustable guides on the bed adjacent to the connection of the die therewith, as and for the purpose described.

2. In a device of the kind described, the combination with a suitable die provided with an opening therein, the walls of which are substantially straight from top to bottom and said walls being fluted substantially from top to bottom, of a form having a non-fluted edge adapted to project through said opening and cooperating directly with the fluted wall thereof to shape the material therebetween.

3. In a device of the kind described, a form in combination with a suitable die therefor provided with an opening therein registering with the form, and arranged to cooperate therewith to shape a sheet of material placed therebetween, and independent means for increasing the forming strain at a point in the material blank corresponding to the hollow of the foot.

4. In a device of the kind described, a form in combination with a suitable die therefor provided with an opening therein substantially registering with the form, and arranged to cooperate therewith to shape a sheet of material placed therebetween, and independent means located on the die proximate to the edges of said opening at the sides thereof for increasing the forming strain at a point in the material blank corresponding to the hollow of the foot.

5. In a device of the kind described, a form in combination with a suitable die therefor provided with an opening therein substantially registering with the form and arranged to cooperate therewith to shape a sheet of material placed therebetween and adjustable means located on the die, proximate to the edges of said opening at the sides thereof for increasing the forming strain at a point in the material blank corresponding to the hollow of the foot.

6. In a device of the kind described, a form in combination with a suitable die therefor provided with an opening therein substantially registering with the form and arranged to cooperate therewith to shape a sheet of material placed therebetween and removable means located on the die, proximate to the edges of said opening at the sides thereof for increasing the forming strain at a point in the material blank corresponding to the hollow of the foot.

7. In a device of the kind described, a form in combination with a suitable die therefor provided with an opening therein substantially registering with the form and arranged to cooperate therewith to shape a sheet of material placed therebetween and adjustable and removable means located on the die, proximate to the edges of said opening at the sides thereof for increasing the forming strain at a point in the material blank corresponding to the hollow of the foot.

8. In a device of the kind described, a form in combination with a suitable die therefor with an opening therein substantially registering with the form and arranged to cooperate therewith, to shape a sheet of material placed therebetween, means for distributing the surplus material acted upon, means for increasing the forming strain on the sheet of material at a point in the same corresponding to the hollow of the foot and means for reciprocating the form relatively to the die.

In testimony whereof, I have hereunto signed my name in the presence of two subscribing witnesses.

CHARLES S. HUNTINGTON.

Witnesses:

A. A. McCLURE,  
M. ENGLER.