

H. STONE.
EXTERNAL SHOE TREE.
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947,951.

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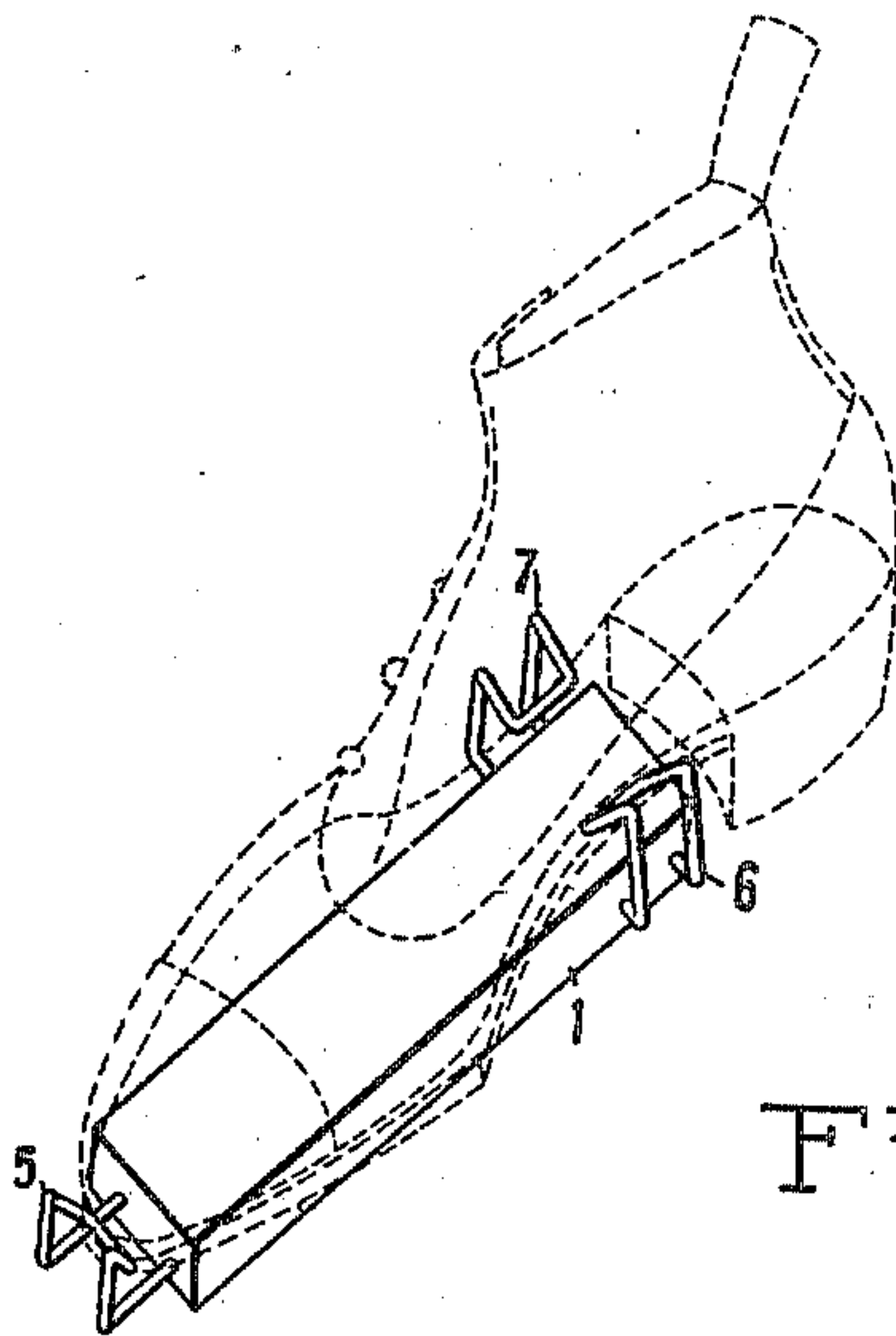


Fig. 1.

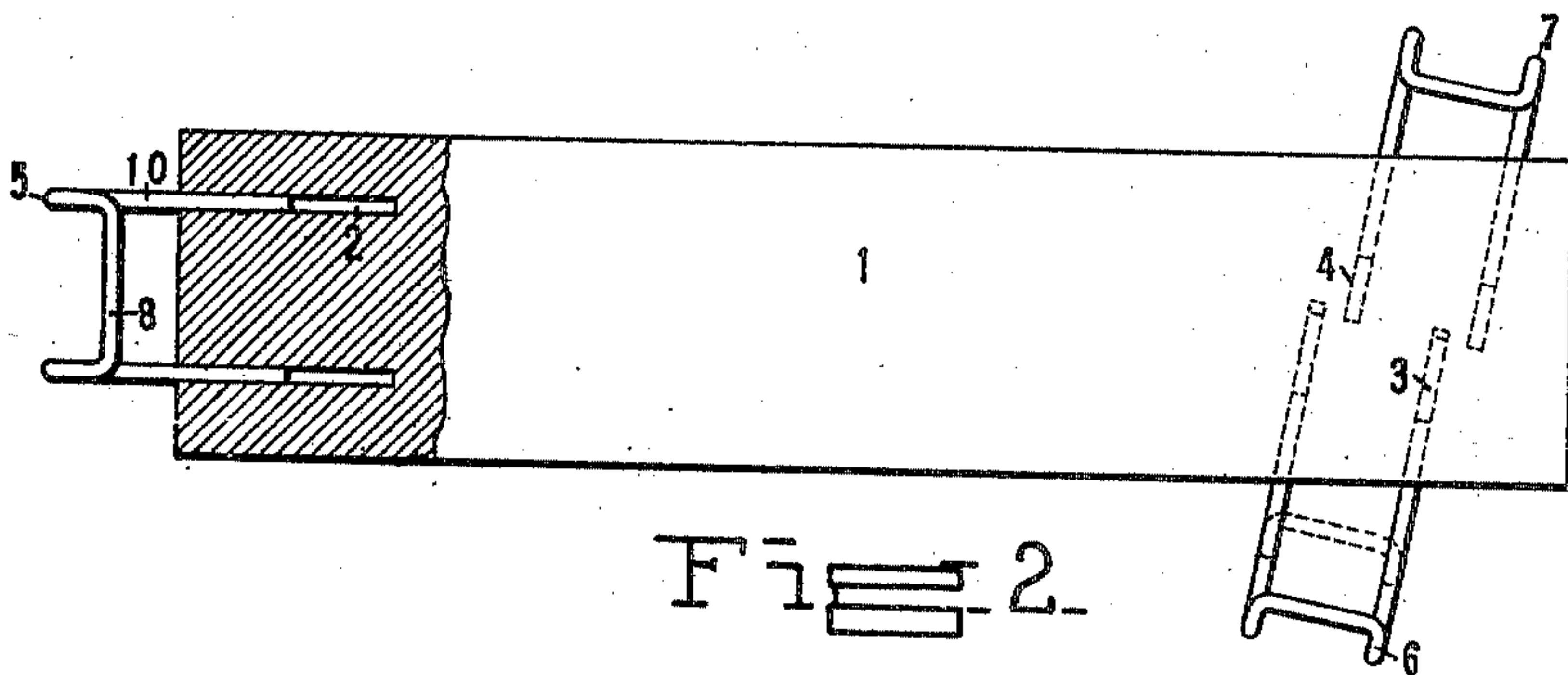


Fig. 2.

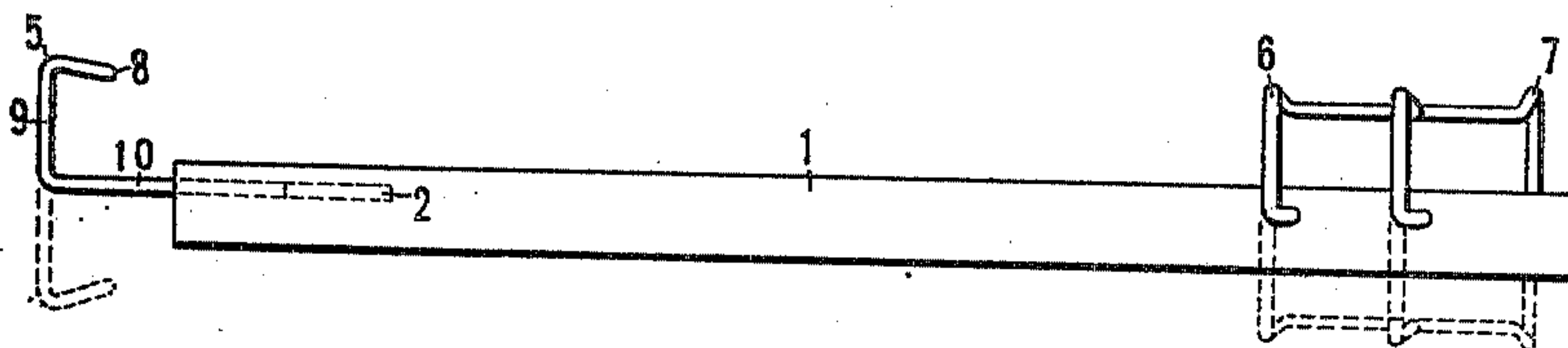


Fig. 3.

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EXTERNAL SHOE-TREE.

947,951.

Specification of Letters Patent.

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To all whom it may concern:

Be it known that I, HAROLD STONE, a citizen of the United States, residing at Syracuse, in the county of Onondaga and State of New York, have invented certain new and useful Improvements in External Shoe-Trees, of which the following is a full, clear, and exact description, such as will enable others skilled in the art to which it appertains to make and use the same.

This invention relates to an improvement in devices for preventing shoes from losing their shape or becoming wrinkled.

One of the objects is to provide a device of this character which will be efficient in use and which is compact, simple in construction and inexpensive to manufacture.

Another object is to provide a device of this nature which may be employed with shoes of various kinds and sizes.

A further object is to provide a practical device of this nature which is adjustable, and which may be readily and quickly secured in position.

Other objects will be in part obvious and in part pointed out hereinafter.

The invention accordingly consists in the features of construction, combinations of elements and arrangement of parts which will be exemplified in the construction hereinafter set forth, and the scope of the application of which will be indicated in the following claims.

In the accompanying drawings wherein is shown one of various possible embodiments of the invention, Figure 1 is a perspective view of the device as attached to a shoe; Fig. 2 is a plan view of the device part being broken away for the sake of clearness; Fig. 3 is a view in side elevation.

Similar reference characters refer to similar parts throughout the several views.

As tending to a more ready understanding of certain features of this invention, it may here be noted that various devices have been employed for preventing shoes from losing their shape or restoring shape thereto, among which are the well-known shoe trees, which comprise one or more blocks adapted to be inserted within the shoe. While devices of this character are fairly efficient, it is usually necessary to have differently formed shoe trees corresponding to the different shapes or sizes of the shoes. Another defect in devices of this character is their

bulkiness and weight which renders them especially objectionable if it is desired to pack them in a valise or dress-suit case when traveling. Other devices of various types are provided, but these devices are inefficient and impractical and in some cases injure the shoe. In the device hereinafter described the advantageous features of the shoe tree are retained, while its inherent disadvantages are done away with.

Referring now to the drawings, 1 indicates a rigid body portion of any suitable size and shape and formed of any suitable material, preferably wood, which is both strong and light. The body portion in the embodiment shown is provided with recesses 2 extending inwardly from one end thereof in a longitudinal direction with respect to the body portion, and with oppositely disposed recesses 3 and 4 adjacent its opposite end and extending in a lateral direction with respect to the body portion, these last mentioned recesses being preferably inclined slightly, as clearly shown in Fig. 2 for a purpose hereinafter disclosed. Within the recesses are supported the sole-engaging members 5, 6 and 7, each of which is preferably formed of stout wire bent as shown in the drawings to form a lip 8 and downwardly extending portions 9 the free ends 10 of which are bent at substantially right angles thereto and are adapted to engage the recesses 2, 3 and 4 respectively, as shown in Fig. 2. These members which are similar in all respects, and therefore interchangeable, are preferably so formed that their free ends 10 tend to spring apart when removed from the body portion; this spring action creating friction between the free ends and the walls of the recesses within which they are located, whereby the members are maintained in their adjusted positions. The members 6 and 7 which are positioned within the laterally extending recesses 3 and 4 will be inclined slightly to the central vertical plane of the body portion, thus conforming to the outline of the sole of the shoe.

It will be understood from the above description that the engaging member 5 located at the end of the body portion 1 may be moved inwardly or outwardly in order to accommodate the device to shoes of different lengths, and the engaging members 6 and 7 may be adjusted in a similar manner to engage shoes of varying widths.

In order to accommodate the device to shoes having soles of different thicknesses, the recesses are preferably positioned in a plane eccentrically positioned with respect to the horizontal central plane of the body portion, and substantially parallel thereto, as plainly indicated in Fig. 3. By means of this peculiar construction it will be understood that when the engaging members are positioned as indicated in solid lines in Fig. 3, the device is adapted to be used with shoes having comparatively thick soles, while by reversing the position of the engaging members with respect to the body portion, thereby by causing them to assume the position indicated in dotted lines, the device will be in condition to be attached to shoes having comparatively thin soles, as in the latter instance the lips of the engaging members will be spaced at a less distance from the cooperating surface of the body portion than will be the case in the first instance.

The device is attached to the shoe as illustrated in Fig. 1, with one of the surfaces of the body member 1 engaging the bottom of the sole, the engaging member 5 at the end thereof is so adjusted that its lip will extend over and engage the upper surface of the sole at the toe, and the engaging members 6 and 7 at the sides will be adjusted so that their lips will extend over and engage the upper surface of the sole at points in front of the heel, preferably at the instep portion of the shoe. It will, of course, be understood that there will be a pair of these devices for each pair of shoes, the other member of the pair being the same as that shown in the figures, with the exception that the laterally extending members will be inclined in an opposite direction to that shown in Fig. 2, in which the device for the right shoe is shown.

It will be seen that a device constructed as above set forth is simple and compact, and, on account of the adjustability of the engaging members, it is adapted to be used with shoes of various shapes or sizes. Furthermore, by reason of the eccentric mounting of the engaging members with respect to the horizontal central plane of the body portion the members may be reversed in order that the device may be used with shoes having soles of different thicknesses. The device, furthermore, is strong and efficient in use as, on account of the rigidity of the body portion, any tendency of the sole of the shoe to curve is positively prevented; this feature being absent in devices which have a resilient body portion. The device may be readily attached and it is free from any fastening means which would tend to strip the lifts from the heel.

As many changes could be made in the above construction and many apparently widely different embodiments of this inven-

tion could be made without departing from the scope thereof, it is intended that all matter contained in the above description or shown in the accompanying drawings shall be interpreted as illustrative and not in a limiting sense.

It is also understood that the language used in the following claims is intended to cover all of the generic and specific features of the invention herein described, and all statements of the scope of the invention which, as a matter of language, might be said to fall therebetween.

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

1. An external shoe-tree comprising, in combination, a rigid flat body portion, means at one end thereof adapted to engage the upper surface of the sole of the shoe at the toe, and laterally adjustable means at each side and near the opposite end thereof adapted to engage the upper surface of the sole at points directly adjacent the heel, whereby the sole is held in flat position.

2. An external shoe-tree, comprising, in combination, a rigid flat body portion, means at one end thereof adapted to engage the upper surface of the sole of the shoe at the toe, and laterally adjustable means at each side and near the opposite end of said body portion adapted to engage the upper surface of the sole at points directly adjacent the heel, one of said laterally adjustable means being nearer the end than the other, whereby the shoe-tree is better adapted to engage the shoe for which it is intended.

3. In a device of the class described, comprising, in combination, a body portion, means mounted thereon adapted to engage the sole of a shoe at the toe thereof, and means mounted at each side of the body portion adapted to engage the upper surface of the sole at a point in the rear of the toe and clamp the same to said body portion, said last mentioned means being inclined in opposite directions with respect to the body portion.

4. In a device of the class described, in combination, a body portion having recesses at the end thereof, a single toe-engaging means slidably mounted within said recesses, and oppositely disposed means supported by said body portion and movable laterally with respect thereto for engaging the upper surface of the sole at points in the rear of the toe.

5. In a device of the class described, in combination, a body portion, means supported thereby and movable longitudinally with respect thereto for engaging the sole of the shoe at the toe thereof, said body portion having a plurality of laterally disposed recesses at each side thereof, and a single means slidably mounted in the recesses at

each side of said body portion adapted to engage the upper surface of the sole of the shoe in the rear of the toe.

6. In a device of the class described, in combination, a body portion provided with longitudinal extending recesses at one end thereof, and a single sole-engaging means slidably mounted within said recesses.

7. In a device of the class described, in combination, a body portion provided with longitudinally extending recesses and laterally extending recesses and sole-engaging means slidably mounted within said recesses.

8. In a device of the class described, in combination, a body portion provided with longitudinally extending recesses and oppositely disposed laterally extending recesses on both sides of said body portion, and sole-engaging means slidably mounted within said recesses.

9. In a device of the class described, in combination, a body portion, and a single sole engaging means operatively associated therewith and reversibly mounted whereby the same may occupy a plurality of positions for engaging soles of different thicknesses.

10. In a device of the class described, in combination, a body portion, and reversible sole-engaging means supported thereon, said means being supported upon said body eccentrically with respect to its central horizontal plane, whereby said means may be caused to assume a plurality of positions with respect to said body portion for engaging soles of different thicknesses.

11. In a device of the class described, in combination, a body portion, and removable sole-engaging means supported thereby, said means being supported eccentrically with respect to the central horizontal plane of said body portion.

12. In a device of the class described, in combination, a body portion provided with recesses eccentrically positioned with respect to the central horizontal plane thereof, and reversible sole-engaging means removably supported within said recesses.

13. In a device of the class described, in combination, a body portion provided with a plurality of pairs of recesses eccentrically positioned with respect to the central horizontal plane thereof, and reversible sole-engaging means removably supported within said pairs of recesses.

14. In a device of the class described, in combination, a body portion provided with a plurality of pairs of recesses eccentrically positioned with respect to the central horizontal plane thereof, said recesses lying substantially in the same horizontal plane, and a plurality of reversible sole-engaging means removably supported within said pairs of recesses.

In testimony whereof I affix my signature, in the presence of two witnesses.

HAROLD STONE.

Witnesses:

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M. A. MULLIN.