

C. B. KOSTERS.
SHOE FORM.

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969,165.

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Fig. 1.

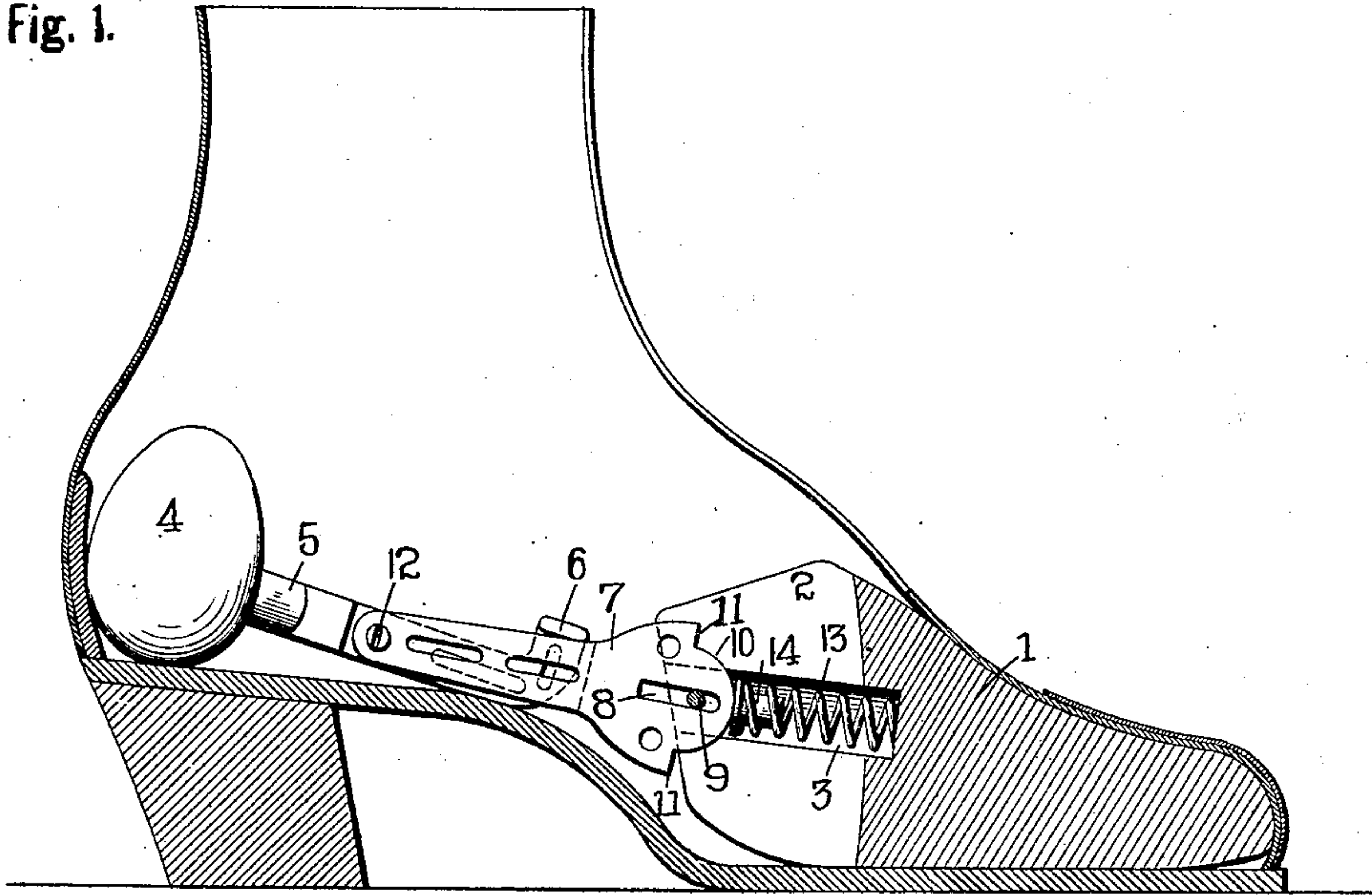


Fig. 2.

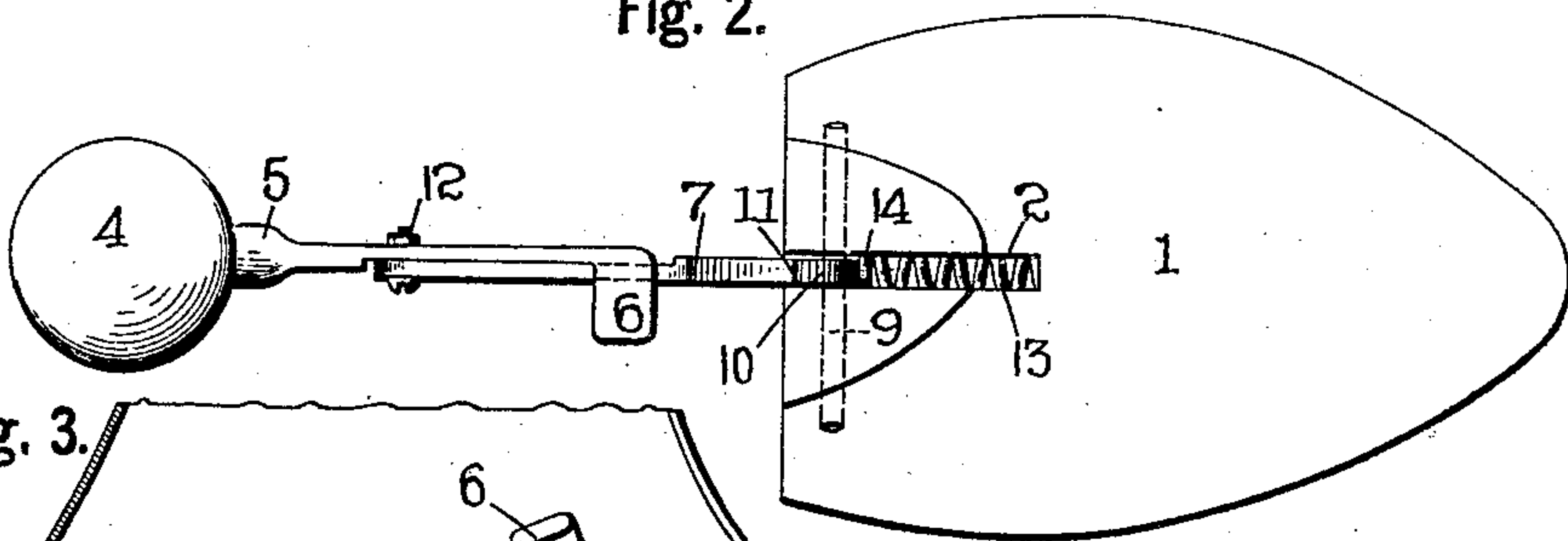
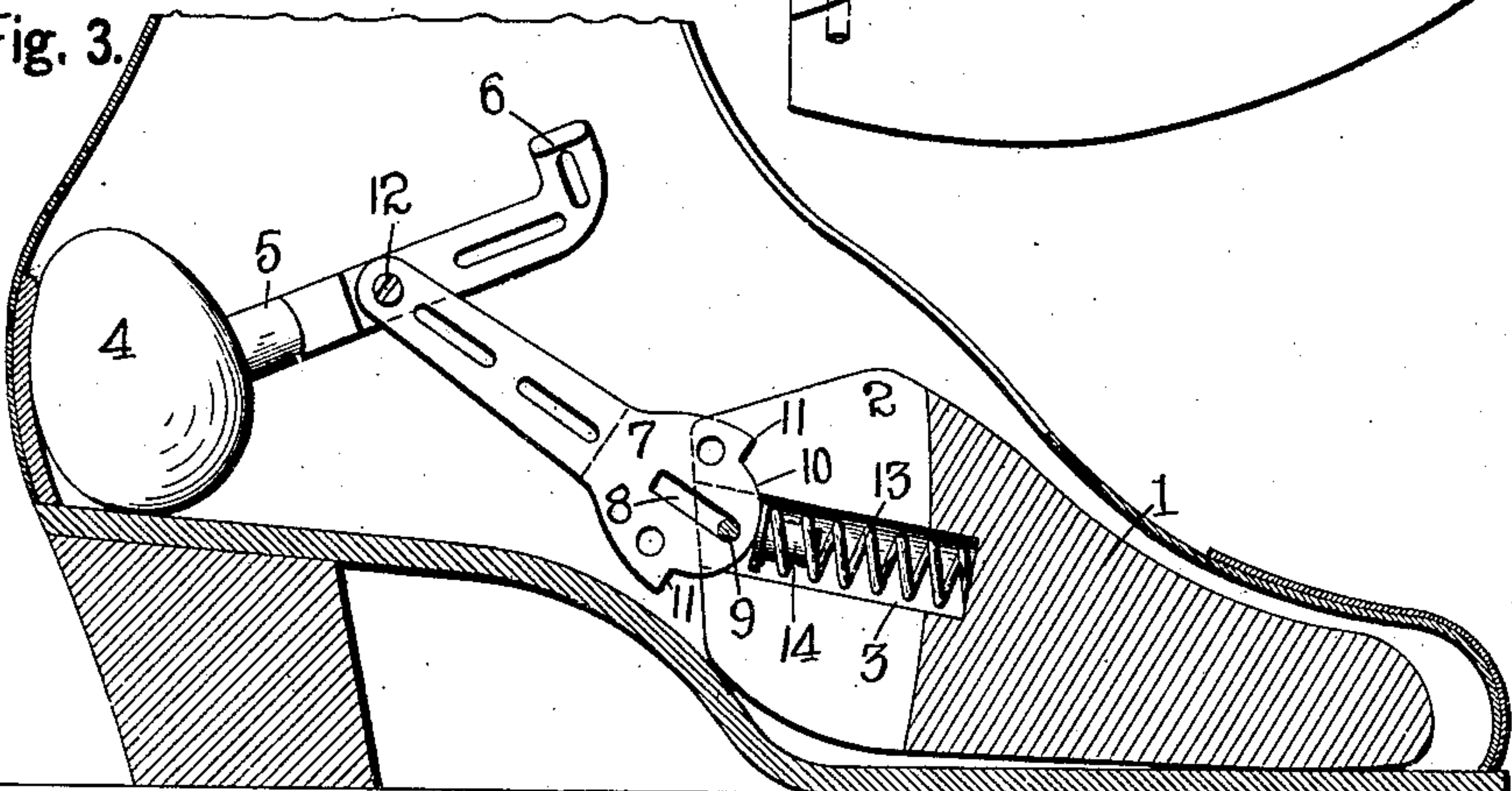


Fig. 3.



Witnesses.

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SHOE-FORM.

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Specification of Letters Patent.

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To all whom it may concern:

Be it known that I, CLEMENTS B. KOSTERS, a citizen of the United States, residing at Buffalo, in the county of Erie and State of New York, have invented a certain new and useful Improvement in Shoe-Forms, of which the following is a specification.

This invention relates to improvements in shoe trees and the objects of the invention are to provide a comparatively simple, strong and cheap device adapted to be fitted in a shoe to press out the wrinkles in the forward portion thereof and maintain the shoe in unwrinkled condition when removed from the wearer's foot.

The invention also relates to certain details of construction, which will be hereinafter described and claimed reference being had to the accompanying drawings, in which:—

Figure 1 represents a vertical central longitudinal section through a shoe with the improved shoe tree fitted therein in its extended or tensioning position and the shoe tree being partially in side elevation and partially in vertical section. Fig. 2 is a top plan view of the shoe tree. Fig. 3 is a view similar to Fig. 1 with the exception that the shoe tree is in its shortened or untensioning position.

In referring to the drawings in detail, like numerals designate like parts.

The tree essentially consists of three members, a toe member, a heel member and a connecting member.

The toe member 1 is preferably formed of wood and is shaped to conform substantially to the interior contour of the forward portion of the shoe as shown in Fig. 1. A narrow vertical slot 2 is cut in the rear end of the toe member which extends centrally and longitudinally through about the rear third of the toe member. A socket 3 is likewise bored longitudinally in the rear of the toe member which is deeper than the slot and passes centrally through the slot as shown in Figs. 1 and 3.

The heel member consists of an egg shaped end portion 4 which is preferably formed of wood and a stem 5 which is preferably of metal and has its rear end fitted in a socket in the end portion 4 and its forward extrem-

ity curved upward and then bent laterally over to form a lifting piece 6.

The connecting member 7 is preferably a thin metal plate having a longitudinal slot 8 in its forward part through which a transverse pin 9 extends to pivot the connecting member in the slot of the toe member. The forward part of the connecting member is made considerably wider than the other part and its forward end has its edge curving in both directions from the center as shown at 10 in Figs. 1 and 3 with straight shoulders 11 at the ends of the curved portion of the edge. The rear end of the connecting member is pivoted by a screw bolt or other device 12 to the intermediate part of the stem 5 of the heel member in the rear of the lifting piece 8. This is due to the fact that the piece 6 extends over the connecting member 7 and contacts with the top edge of said connecting member when the connecting member and the stem of the heel are moved downward into approximately longitudinal alinement.

A spiral spring 13 is located in the socket 3 of the toe member and a headed pin 14 is fitted in the rear extremity of the spring 13 with its head bearing against the curved edge 10 of the connecting member.

The lifting piece 6 besides forming a convenient means for raising the forward end of the heel member and thus shorten the shoe tree also acts as a projecting stop to limit the downward movement of said heel member.

The operation of the device will be easily understood from the accompanying drawings, the tree being inserted in the shoe when in its shortened condition as shown in Fig. 3 and then lengthened by pressing down on the lifting piece into the tensioning position shown in Fig. 1.

The tree is removed from a shoe by raising the lifting piece which first shortens the tree in length and then by a further movement bodily removes the tree from the shoe. In this connection it should be noted that the provision of a removing projection on the heel member is avoided as the lifting piece serves to both shorten the tree and remove it from the shoe. This decidedly simplifies and cheapens the structure besides materially facilitating the operation of fit-

ting the tree in or removing it from a shoe
owing principally to the fact that there is
but one lifting element to grasp and the
location of that element in an intermediate
5 part of the shoe tree.

I claim—

1. A shoe tree comprising a toe member
having a rearwardly extending longitudinal
slot and socket, a spring in said socket, a
10 heel member having a stem provided with a
laterally bent forward portion and a con-
necting member pivoted at its rear end to
the heel member in the rear of the laterally
bent forward portion and having a longi-
15 tudinal slot and a curved front edge, a pivot
pin passing transversely through the rear
portion of the toe member and the longi-
tudinal slot in the connecting member to
pivot the front portion in the slot of the toe
20 member and a headed pin fitted in the rear
end of the spring with its head bearing

against the curved front edge of the con-
necting member.

2. A shoe tree comprising a toe member
having a slot and a socket, a spring in said 25
socket, a heel member and a connecting
member pivoted at its rear end to the heel
member and having a fairly wide front part
provided with a longitudinal slot and a
curved front edge, a pivot pin passing trans- 30
versely through the rear portion of the toe
member and the slot in the connecting mem-
ber to pivot the front portion in the slot of
the toe member and a headed pin fitted in
the rear end of the spring with its head 35
bearing against the curved front edge of the
connecting member.

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Witnesses:

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