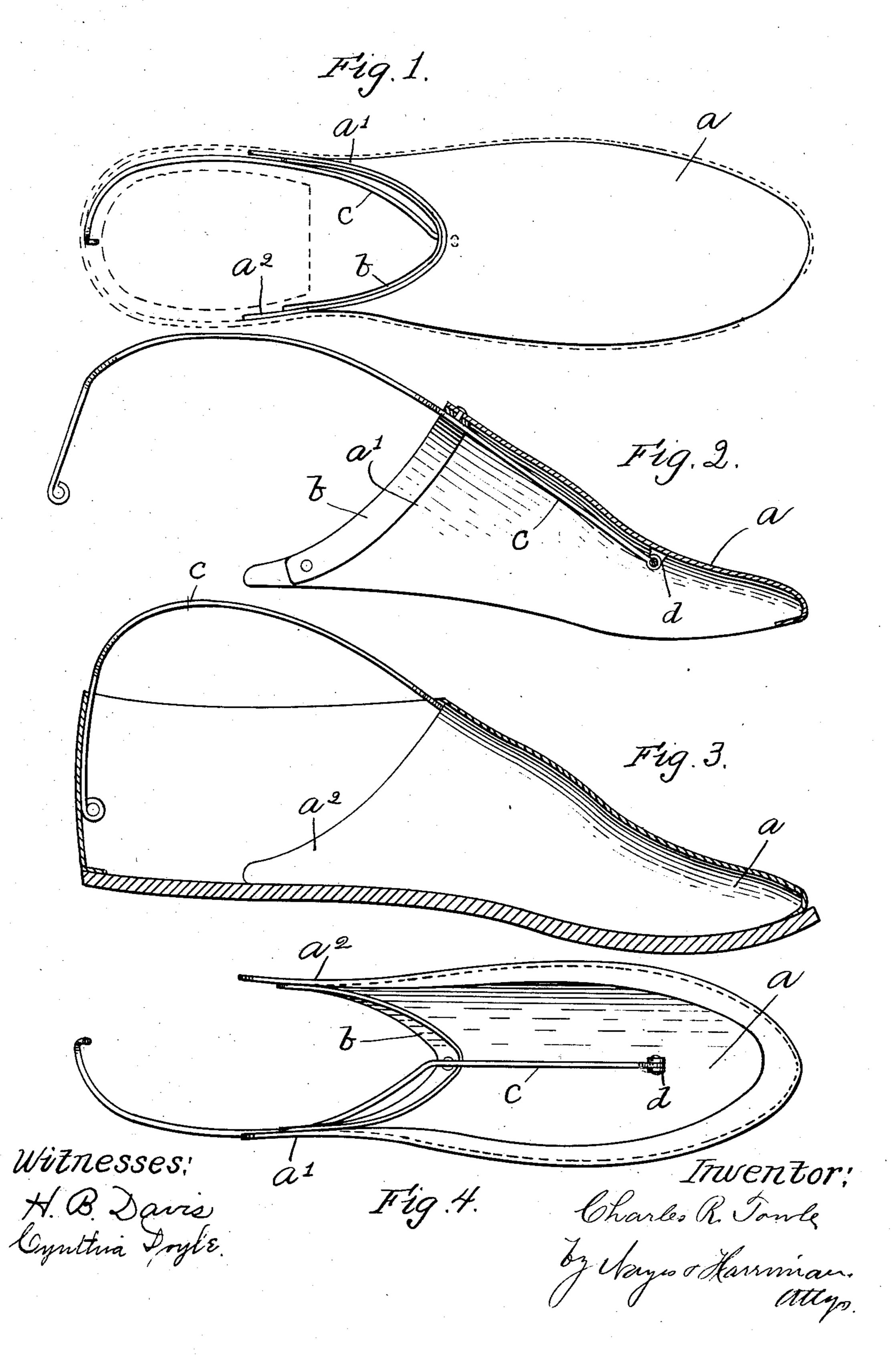
C. R. TOWLE.
SHOE FORM.
APPLICATION FILED JAN. 16, 1908.



## UNITED STATES PATENT OFFICE.

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SHOE-FORM.

No. 895,816.

Specification of Letters Patent.

Patented Aug. 11, 1908.

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To all whom it may concern:

Be it known that I, Charles R. Towle, of Haverhill, county of Essex, State of Massachusetts, have invented an Improvement in Shoe-Forms, of which the following is a specification.

This invention relates to certain improvements in shoe forms which are adapted to be used in the shoe during a portion of the proc10 ess of manufacture.

In attaching the heel to a shoe, it is customary either to employ an iron bottom last, against which the heel attaching nails are driven, or to place the shoe, from which the last has been removed, directly on the ordinary jack of the heeling machine. The first method is objectionable for the reason that the ordinary wooden last is frequently broken and rendered useless by the strain which is placed thereon during the heel attaching operation, and the second method is objectionable for the reason that the stock is usually moist, or in temper, at the time this operation is performed, so that the shoe is pulled out of shape.

The object of my invention is to provide means for holding a shoe in shape while it is being heeled without employing the ordinary wooden last, and yet which permits the heel to be attached on the ordinary heeling machine jack, while the shoe is thus held.

For an understanding of my invention reference is made to the accompanying drawing, in which,

Figure 1 is a plan view of a shoe form made according to my invention and showing the same inserted in a shoe. Fig. 2 is a central longitudinal section view of the device. Fig. 3 is a side elevation of the device shown in position in a shoe, the latter being shown in longitudinal section, and, Fig. 4 is a bottom plan view.

In carrying out my invention I provide a hollow form a, which is adapted to fit the forepart of the shoe, said form being preferably of spring sheet metal, although it may also be made of leather board, or similar material. The form is open at the bottom from a point a short distance in the rear of the toe portion and is provided with two side portions a', a' which are adapted to extend rearwardly on each side of the shoe, close to the sole, to points opposite the forward portion of the counter of the shoe. The form is so constructed that said sections will spring

apart when the device is made of spring sheet metal, so as to press said side sections firmly against the sides of the shoe and hold the same open. When the form is made of non-elastic material a U-shaped spring b is 60 secured to the inner side of the form and extends to points adjacent the rear ends of said sections, said spring acting to cause said sections to perform the function above described.

A spring wire c is pivotally connected to a clip d secured to the inner upper side of the form adjacent its middle and at its toe end, and said spring wire is adapted to extend rearwardly, and also transversely, or to one 70 side of the middle line or plane of the form, and then back to said middle line or plane, so that it follows approximately the outline of the rear portion of the shoe. The free end portion of said wire calso extends downwardly 75 in position to engage the middle of the inner side of the shoe at the back thereof, so that it tends to press the form a forwardly into the shoe, and at the same time to press outwardly, or rearwardly, the middle of the back 80 portion of the shoe. The side portions a',  $a^2$ , acting in conjunction with the spring c, tend to spread the opening in the shoe and the spring c, furthermore, acting in conjunction with the form, acts to hold the shoe in shape. 85 If nothing were placed in the shoe to hold the same in shape, it would tend to double up, that is, to bend so that the convex curvature of the sole longitudinally would be increased. It is desirable, however, to prevent the bend-90 ing of the shoe in this manner, and it is preferable that it be bent the other way, if at all, which function is performed by the spring c.

As the spring c extends about the opening in the shoe, it will not interfere with the 95 ready insertion into the shoe of the supporting post or jack of the heeling machine, so that the device when in position in the shoe does not interfere with the work of the operator in placing the shoe upon, or in removing 100 it from the jack.

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

A device of the character described comprising a hollow form adapted to fit the forepart of a shoe and arranged to terminate short of the rear part thereof, and a spring wire disposed within the form, connected at one end to the middle portion thereof, and 110

adapted to extend upwardly from its connected end and then downwardly to engage at its other end the rear end of the shoe, to hold the form in place therein, the intermediate portion of said spring wire being extended to one side of the middle line of the form, substantially as and for the purpose described.

In testimony whereof, I have signed my name to this specification, in the presence of 10 two subscribing witnesses.

CHARLES R. TOWLE.

Witnesses:

FRED CARLTON, F. D. MENZER.