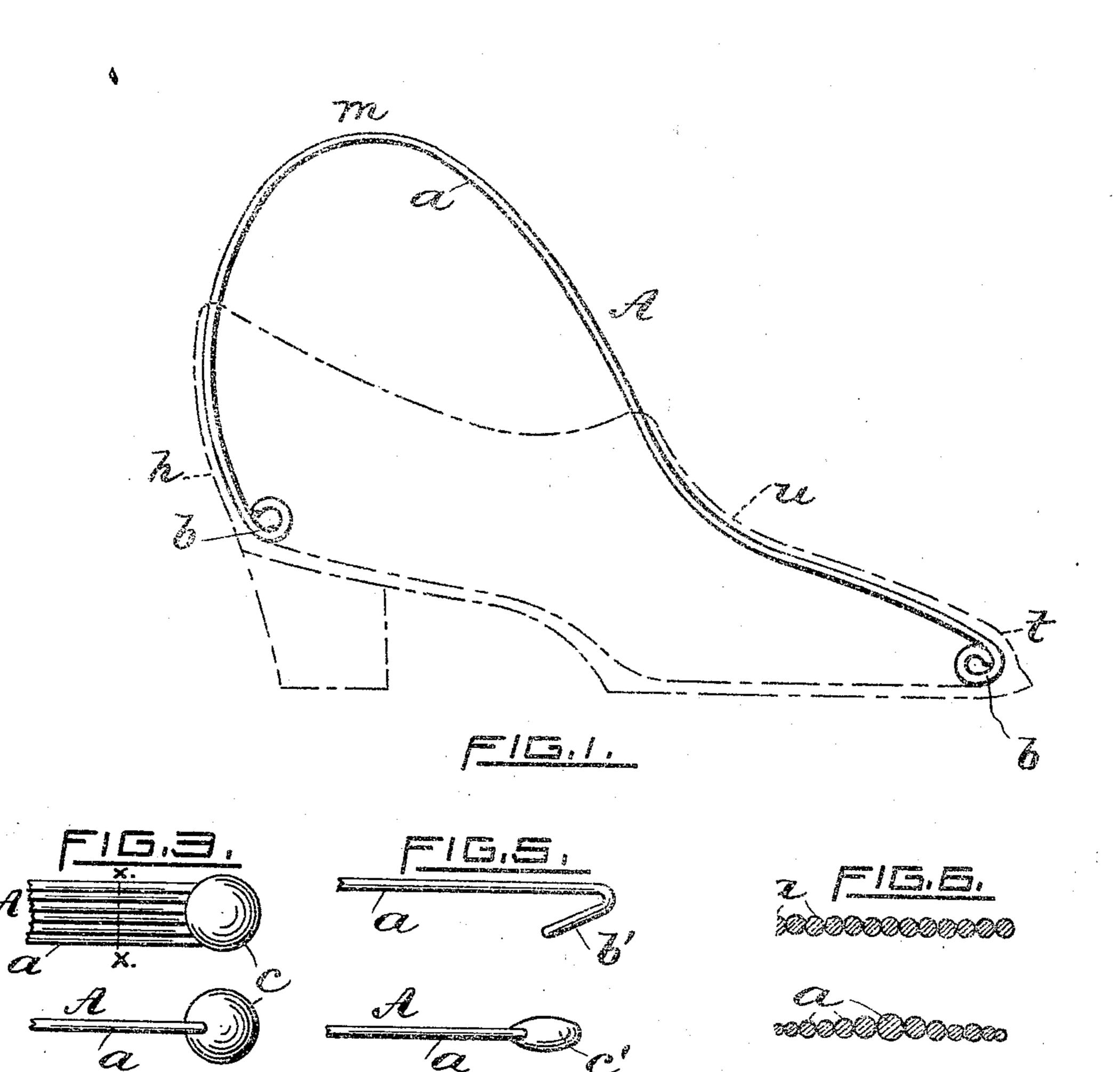
C. E. BAILEY.
SHOE TREE.
APPLICATION FILED JULY 11, 1908.



WITNESSES,

Littannigan. Sternfoldone INVENTOR.

Charles E. Bailey

By Took Imenentoro.

## UNITED STATES PATENT OFFICE.

CHARLES E. BAILEY, OF PROVIDENCE, RHODE ISLAND.

## SHOE-TREE.

No. 868,318.

## Specification of Letters Patent.

Patented Oct. 15, 1907.

Application filed July 11, 1906. Serial No. 325,646.

To all whom it may concern:

Be it known that I, Charles E. Bailey, a citizen of the United States of America, and a resident of Providence, in the county of Providence and State of Rhode 5 Island, have invented certain new and useful Improvements in Shoe-Trees, of which the following is a specification.

Shoe-trees as usually devised and employed are comparatively heavy, cumbersome and expensive. Such former shee-trees consist of connected or hinged blocks of wood or metal arranged when in use to practically fill the forward portion of the shoe, the upper side of the block being previously shaped so as to conform to the normal curve or arch of the shoe-upper or counter.

I am also aware that devices, each made of a single piece of bent spring-wire, for stretching and exhibiting shoes and boots have been produced prior to my invention, and I therefore disclaim such former constructions.

The object I have in view is to produce an inexpensive flexible resilient and self-conforming shoe-tree, the device at the same time being strong and light and occupying a very small amount of room when not in use. Moreover, the device is capable of automatically adapting or adjusting itself to the normal arch of the shoe-upper, its two ends forming abutments for yieldingly engaging the toe and heel portions of the shoe's interior, all as more fully hereinafter set forth and claimed.

In the accompanying sheet of drawings, Figure 1 represents a side elevation of my improved shoe-tree as in use, the shoe being indicated by dotted lines. Fig. 2 shows an end portion of the device provided with a spherical-shaped tip. Fig. 3 is a corresponding plan view. Figs. 4 and 5 represent modified forms of the tip. Fig. 6 is a transverse sectional view, greatly enlarged, taken on line xx of Fig. 3, and Fig. 7 is a similar sectional view, showing the device consisting of a plurality of connected wires varying in thickness or 40 diameter.

My improved shoe-tree A is or may be made of any suitable material possessing a proper degree of flexibility and resiliency, and having the two ends thereof provided with fixed tips or members adapted when in use to engage the toe and heel portions of the shoe's interior. I prefer to make my improved shoe-tree of a plurality of spring-steel wires a, the same being ar-

ranged parallel with one another and connected or united together by solder, thereby practically constituting an integral or unitary member and being sub- 50 stantially rectangular cross-sectionally, as represented in Fig. 6.

As thus constructed the main or body portion of the device is rendered stronger and more resilient as compared with a piece of stock rolled to a flat ribbon-form 55 cross-sectionally. In fact the latter when tempered cannot be bent double without breaking it, whereas when the device is made substantially as represented in the drawings it becomes unbreakable.

The length of the member A should be materially 60 greater than that of the shoe in order that it may properly adapt or adjust itself to the inner shape of the shoe at the median line thereof.

I prefer to tip each end of the body or resilient member with a fixed spherical-shaped metal member c, as 65 indicated in Figs. 2 and 3, although other types of tips may be adopted, for example, the tips b,  $c^1$  and  $b^1$ , represented in Figs. 1, 4, and 5, respectively.

In order to increase the stiffness of the device without materially increasing its weight the wires a comprising the shoe-treet may be of varying thickness or diameter and arranged and united substantially as represented in Fig. 7.

My improved shoe-tree A is well adapted to be readily introduced into and removed from the slice; it 75 is self-conforming and serves to maintain the normal inner shape of the latter, as at the too, upper and heel portions, t, u and h, respectively, and being in yielding contact therewith.

The device also forms a bail or handle (at m Fig. 1) 80 by means of which the shoe may be conveniently carried about.

I claim as new and desire to secure by United States
Letters-Patent:—

An elongated flexible resilient shoe tree provided at its 85 ends with rounded tips and consisting of a plurality of wires arranged parallel in the same plane and united throughout their length with solder, said tree in use presenting a single continuous arch extending from the base of the heel to the toe of the shoe.

Signed at Providence, R. I., this 9th day of July, 1906.

CHARLES E. BAILEY.

Witnesses:

GEO. H REMINGTON, HENRY P. STONE.