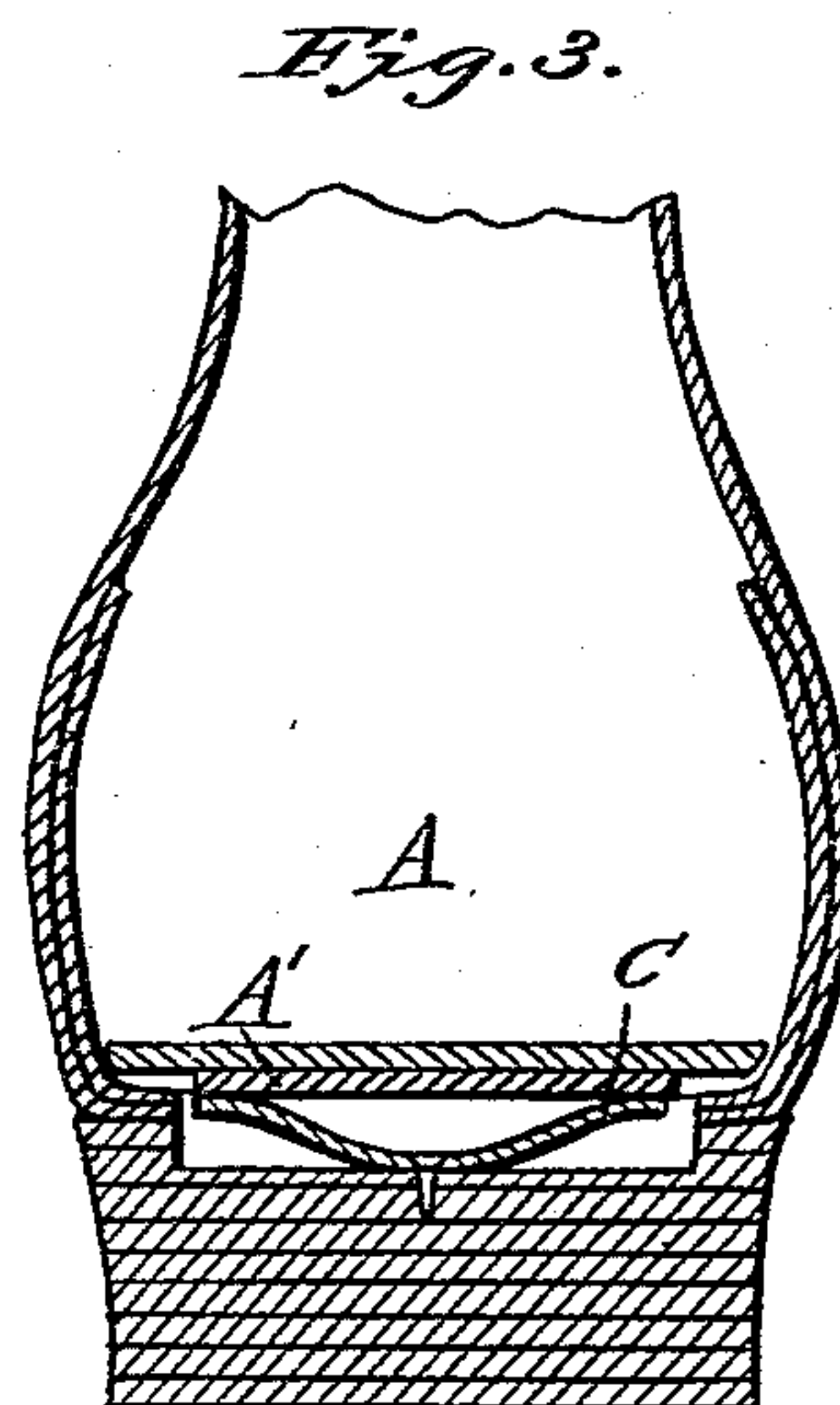
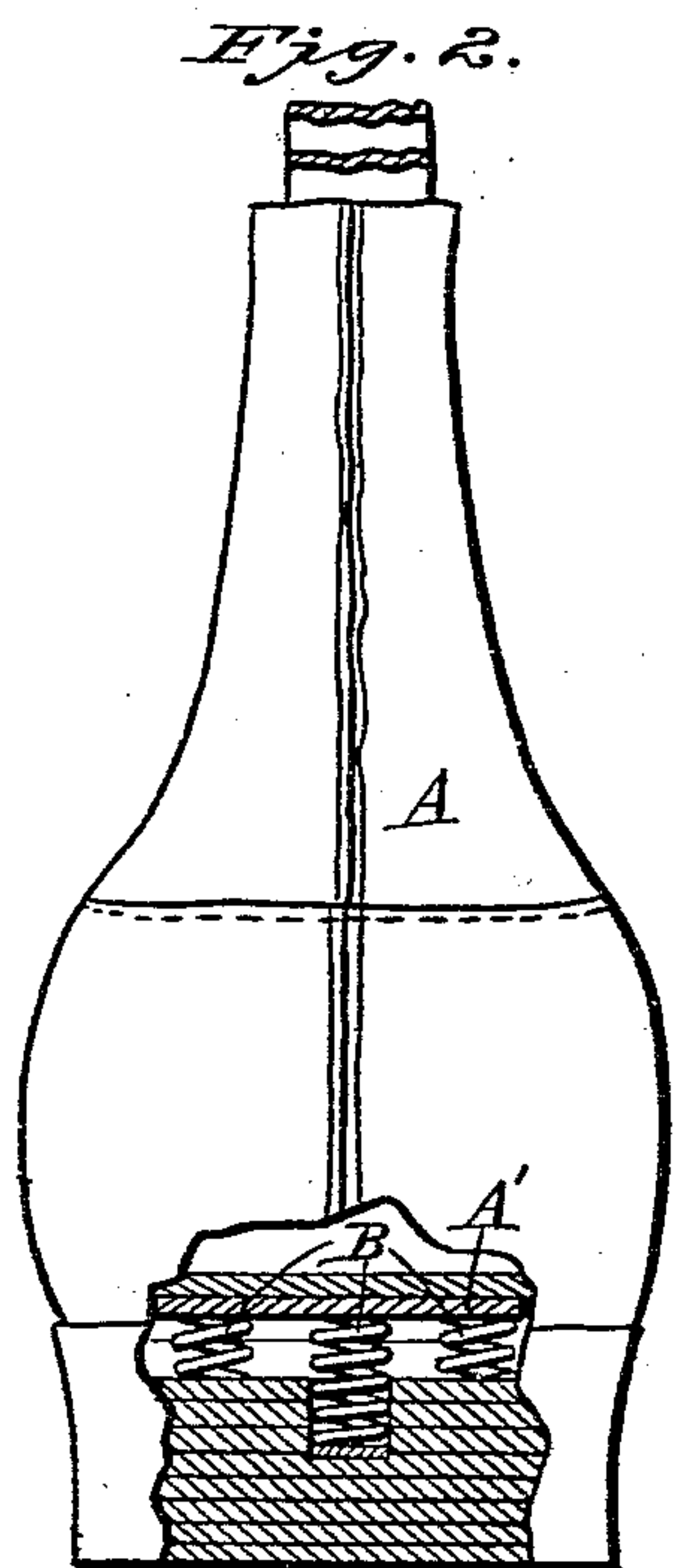
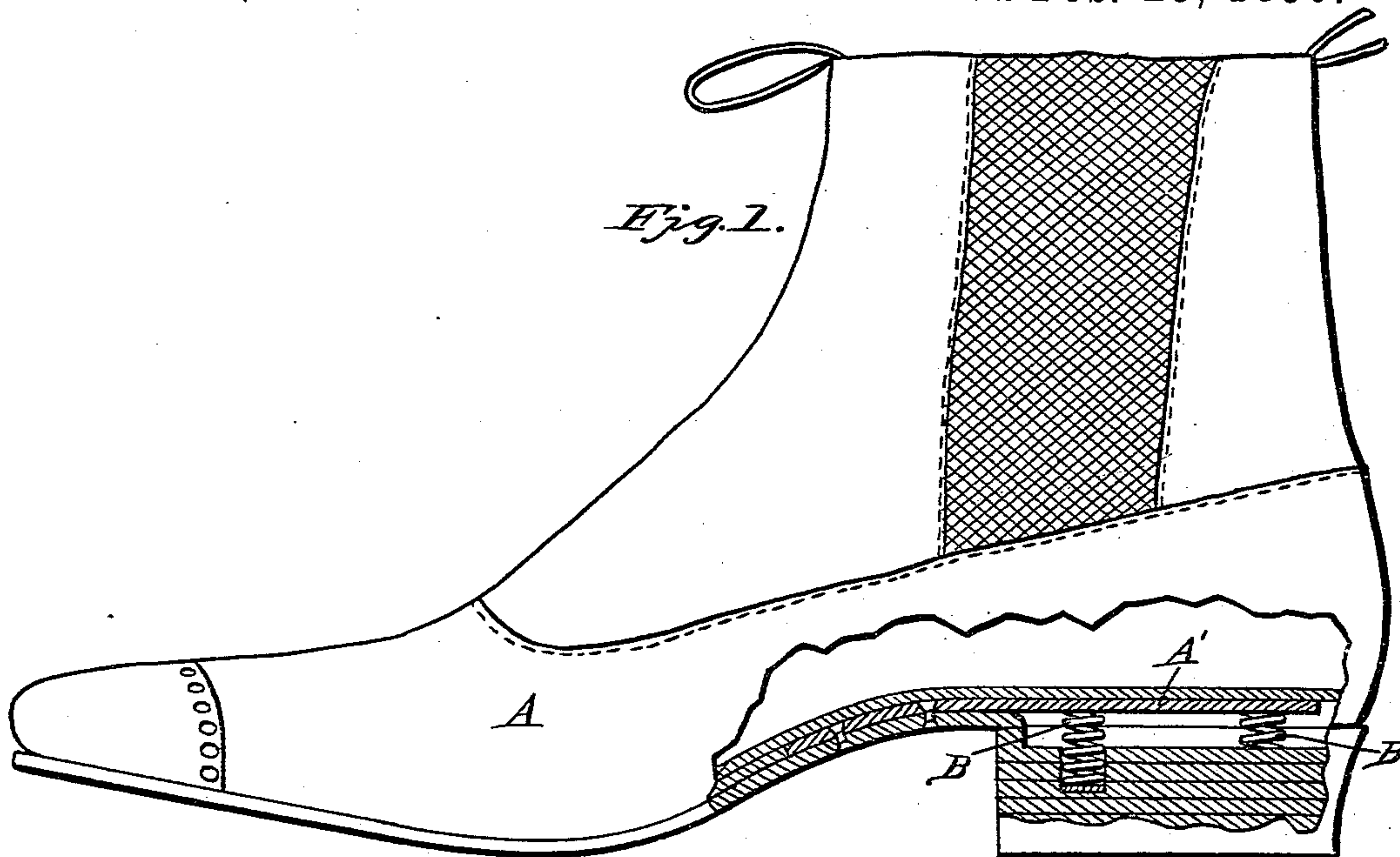


(No Model.)

H. D. RICHEY.  
SPRING HEEL FOR SHOES.

No. 555,402.

Patented Feb. 25, 1896.



Witnesses  
Edwin G. Lee & Co.,  
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Attorney



# UNITED STATES PATENT OFFICE.

HARRY D. RICHEY, OF BELLEVUE, PENNSYLVANIA.

## SPRING-HEEL FOR SHOES.

SPECIFICATION forming part of Letters Patent No. 555,402, dated February 25, 1896.

Application filed October 25, 1895. Serial No. 566,892. (No model.)

*To all whom it may concern:*

Be it known that I, HARRY D. RICHEY, a citizen of the United States, residing at Bellevue, in the county of Allegheny and State of Pennsylvania, have invented certain new and useful Improvements in Spring-Heels for Shoes; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

This invention relates to certain new and useful improvements in spring-heels for shoes or boots of that class designed to relieve the heel of the wearer of the jar occasioned by the contact of the shoe or boot with the ground in walking; and it has for its objects, among others, to provide a simple, cheap and durable device that can be readily embodied in the heel of the shoe or boot to accomplish the desired end.

Other objects and advantages of the invention will hereinafter appear, and the novel features thereof will be particularly pointed out in the appended claims.

The invention is clearly illustrated in the accompanying drawings, which, with the letters of reference marked thereon, form a part of this specification, and in which—

Figure 1 is a side elevation of a shoe with a portion broken away to better show my improvement. Fig. 2 is a rear view of the same with a portion broken away. Fig. 3 is a vertical section showing a modified form of spring.

Like letters of reference indicate like parts throughout the several views.

Referring now to the details of the drawings by letter, A designates a shoe which, except as hereinafter specified, may be of any well-known form of construction. In carrying out my invention a preferable plan is to have the leather at the heel of the shoe or boot inside as much thinner as the thickness of the plate employed, which latter may be of steel, aluminum, galvanized sheet-iron, or any other material best adapted for the purpose. This plate A' is preferably set in flush with the insole of the shoe at the heel and is

supported upon springs, which, as shown in Fig. 1, are coiled springs B, arranged beneath the plate, and, if desired, seated in sockets in the body portion of the heel. The springs should be of sufficient strength to catch the weight of the person and let them down easily. In practice it may be found desirable to provide springs according to the character of the shoe or boot or the weight of the person wearing the same.

Instead of coiled springs B, as above described, I may employ other forms—such, for instance, as shown in Fig. 3—wherein is shown a leaf-spring C, the object and function being, however, substantially the same.

If desired, a thin piece of felt or thin leather may be placed over the plate and under the thin insole to keep the plate from making the heel cold, which it might if brought in direct contact therewith.

What I claim as new is—

1. A boot or shoe having a rigid heel, the leather at the heel as much thinner as the thickness of the plate, combined with a metallic plate set into the heel flush with the insole, and a spring arranged in a recess in the heel beneath said plate and disconnected therefrom, substantially as described.

2. A boot or shoe having a rigid heel, the leather at the heel as much thinner as the thickness of the plate, combined with a metallic plate set into the heel flush with the insole, and a spring arranged in a recess in the heel beneath said plate and disconnected therefrom, said spring being in the form of a leaf-spring secured at its center in the bottom of the recess in which the spring and plate are located and having its ends bearing against the under side of said plate near the edge thereof, substantially as described.

In testimony whereof I have signed this specification in the presence of two subscribing witnesses.

HARRY D. RICHEY.

Witnesses:

WM. B. KIRKER,  
G. W. MCCANDLESS.