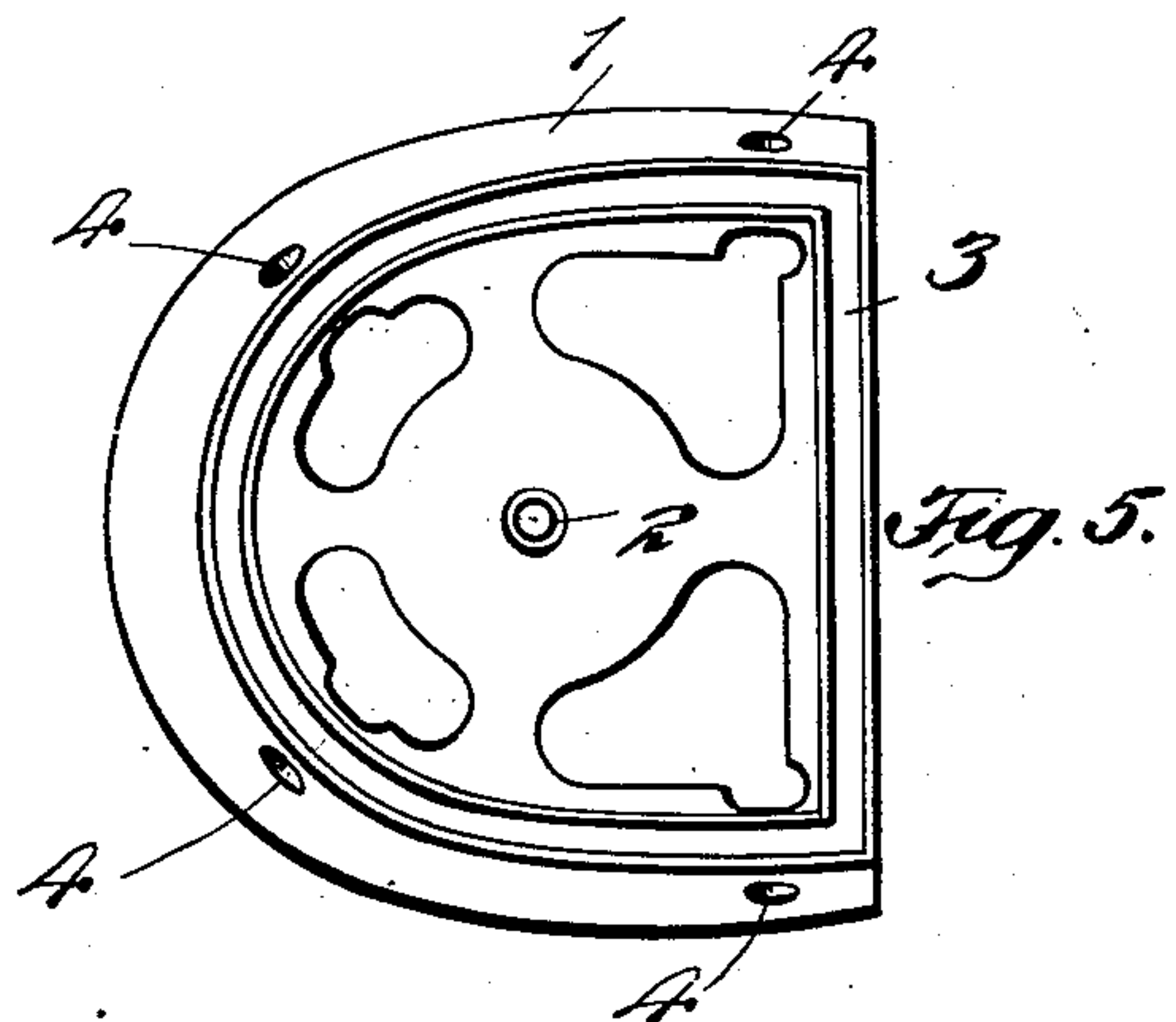
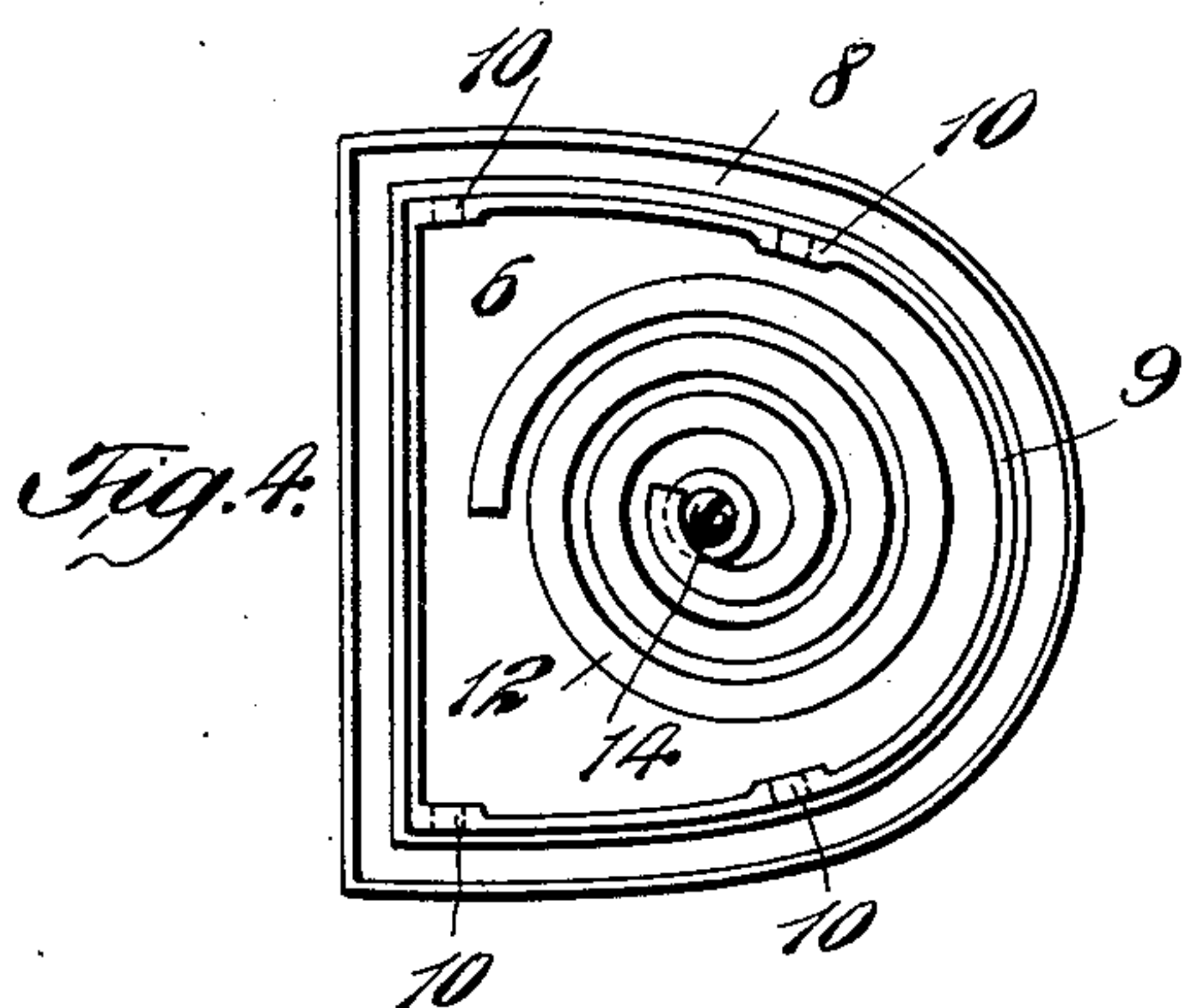
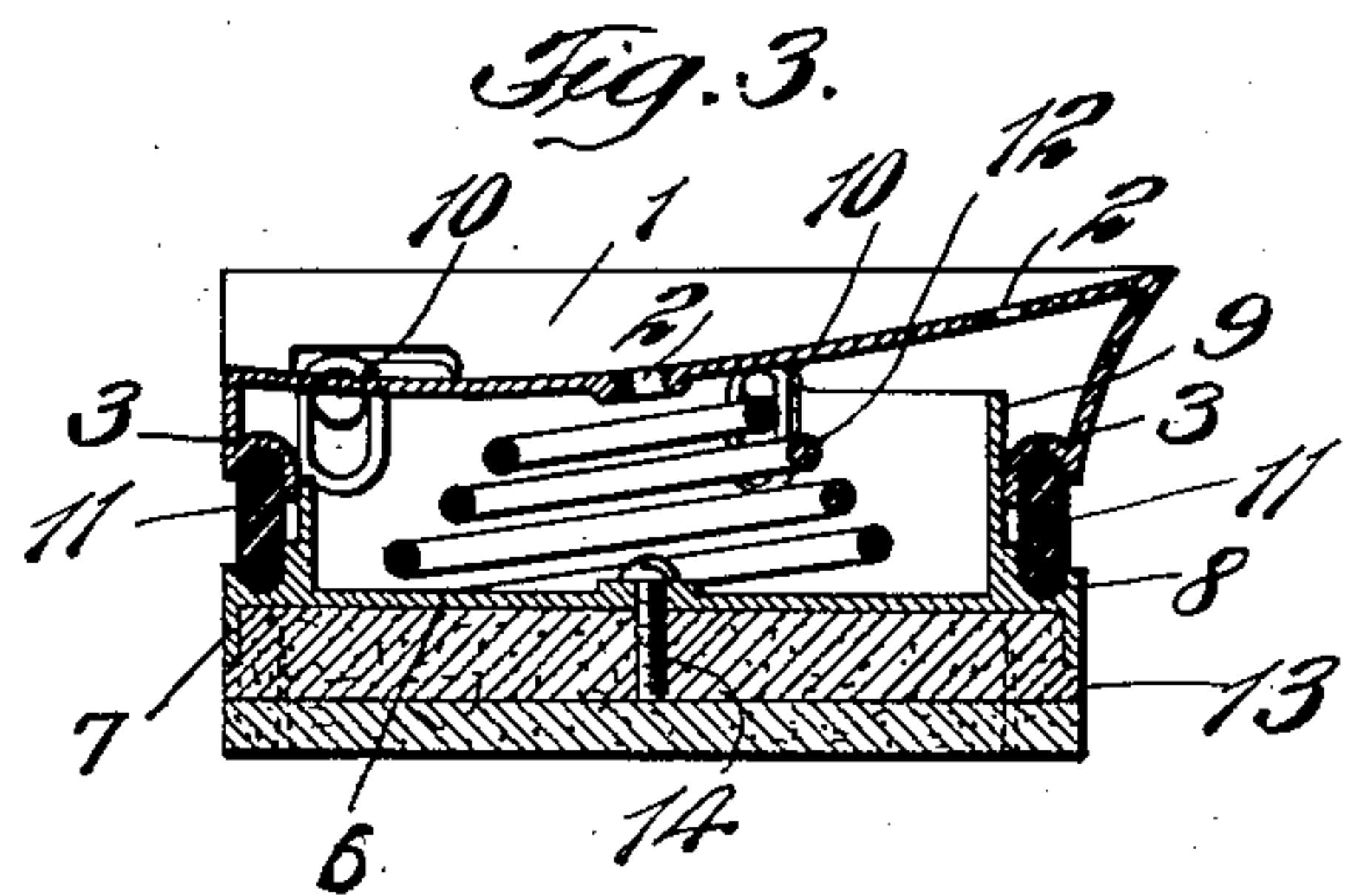
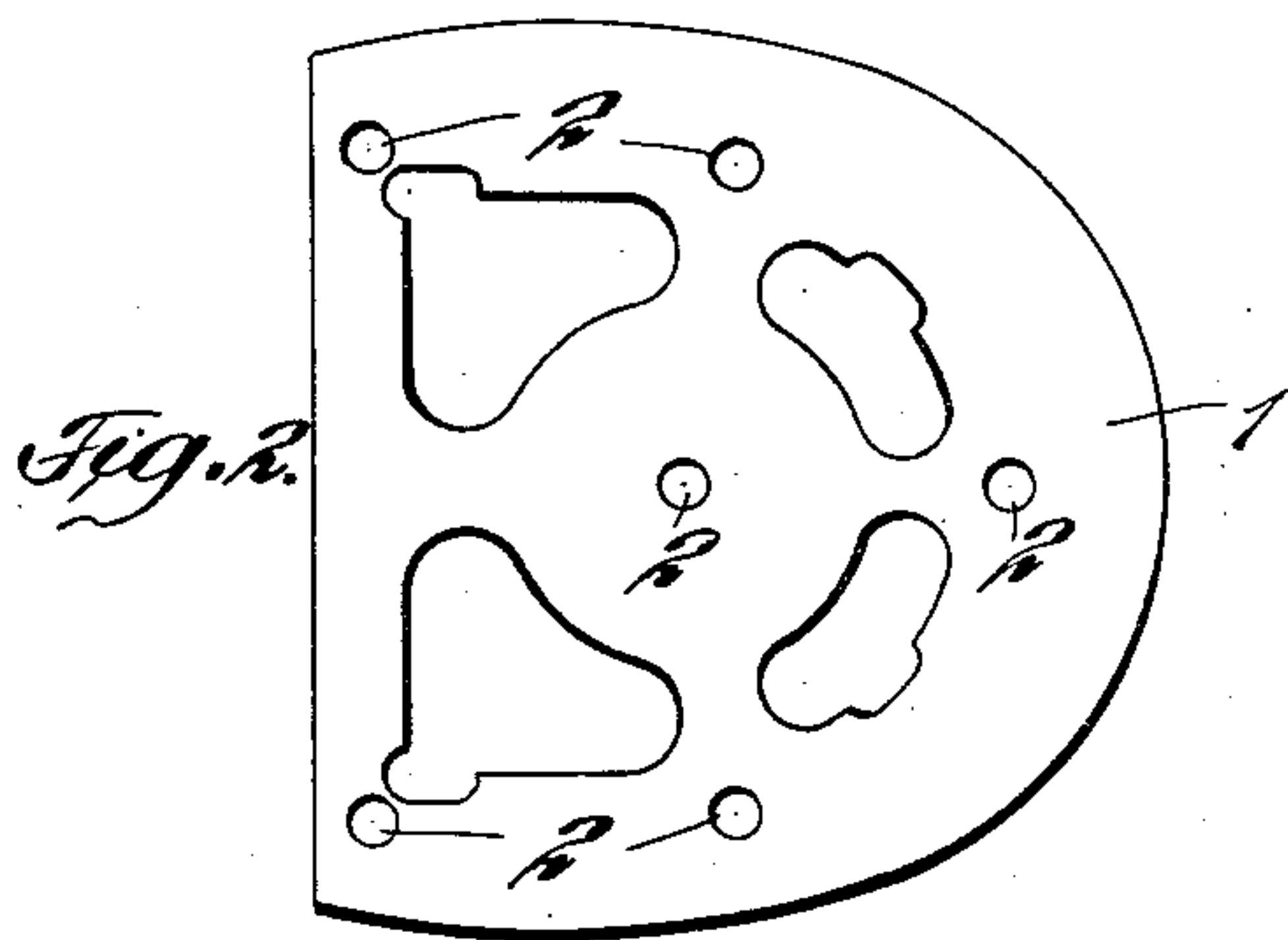
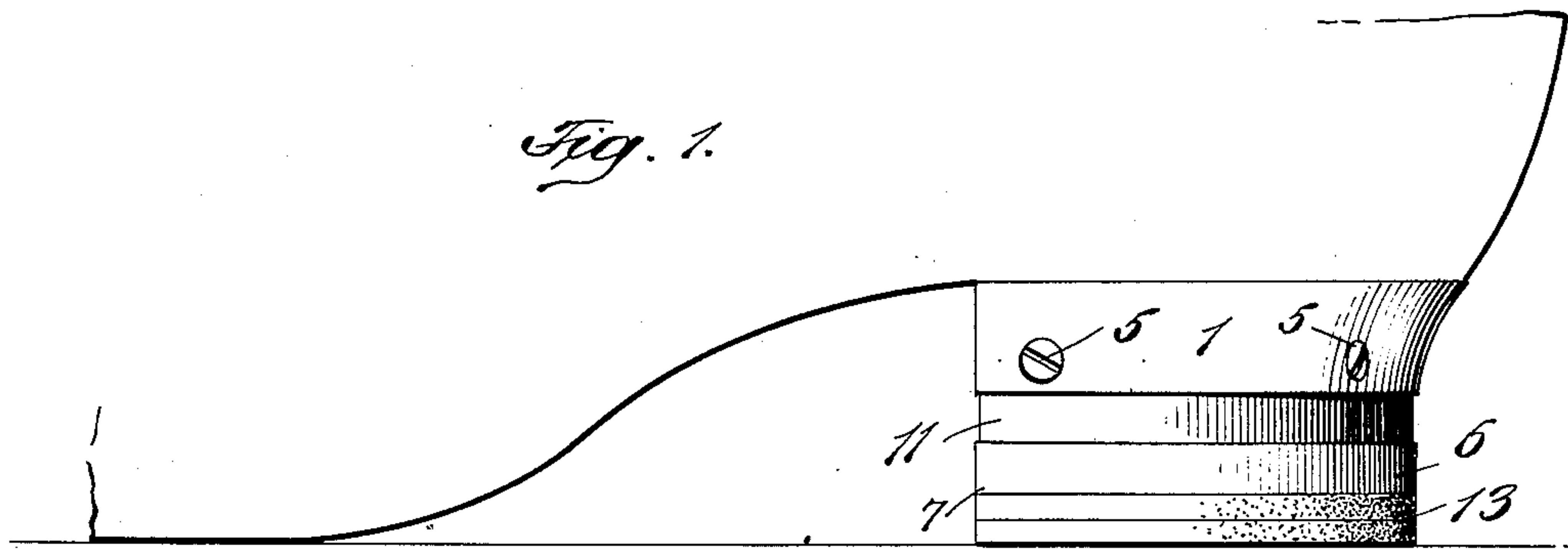


E. A. C. SCHOOF.  
 SPRING HEEL.  
 APPLICATION FILED JUNE 17, 1909.

955,700.

Patented Apr. 19, 1910.



WITNESSES:  
*Julius H. [Signature]*  
*Ernest W. Hodges*

INVENTOR,  
 Ernest A. C. Schoof,  
 BY *A. M. Pierce*,  
 ATTORNEY.



# UNITED STATES PATENT OFFICE.

ERNEST A. C. SCHOOF, OF NEW YORK, N. Y.

SPRING-HEEL.

955,700.

Specification of Letters Patent.

Patented Apr. 19, 1910.

Application filed June 17, 1909. Serial No. 502,825.

*To all whom it may concern:*

Be it known that I, ERNEST A. C. SCHOOF, a citizen of the United States, residing at New York, in the county of New York and State of New York, have invented certain new and useful Improvements in Spring-Heels, of which the following is a specification, reference being had therein to the accompanying drawing.

My invention relates especially to the construction of the heels of boots and shoes, and has for its object the provision of an effective and durable spring heel adapted to eliminate the jar which takes place when heels of ordinary construction are employed.

To attain the desired end, my invention consists in certain novel and useful combinations and arrangements of parts, and peculiarities of construction and operation, all of which will be hereinafter first fully described, and then pointed out in the claims.

In the drawing, Figure 1 is a side elevation of a heel embodying my invention showing the same in place upon a shoe. Fig. 2 is a top plan view of the heel removed from the shoe. Fig. 3 is a vertical, cross-sectional view of my improved heel detached. Fig. 4 is a plan view of the heel with the top plate removed. Fig. 5 is a plan view of the top plate of the heel, looking from below.

Similar numerals of reference, wherever they occur, indicate corresponding parts in all the figures.

1 is a metallic top-plate having holes therein for the reception of screws, or the equivalent, for fastening the heel to the sole of a boot or shoe. The depending rim or edge of the plate 1 is provided with a groove 3, as particularly shown in Figs. 3 and 5 of the drawing and with screw-threaded perforations 4 for the reception of screws 5, the inner ends whereof are not threaded, and project inward some distance beyond the material of plate 1.

6 is a metallic plate having a depending rim 7 and a groove 8 in its upper face corresponding to the groove 3 in the inner side of the plate 1. Extending upward from the plate 6 is an annular projection 9 having slots 10 therein opposite to the screws 5 and into which the smooth ends of said screws project.

11 is a ring of rubber, or equivalent, conforming to the shape of the grooves 3 and

8, and arranged to fit snugly therein, as illustrated in Figs. 1 and 3 of the drawing.

12 is a spiral spring, located between the plates 1 and 6.

13 is a heel piece of leather, or any other preferred material, fitting snugly into the rim of the plate 6, and secured against displacement by a screw 14, or the equivalent.

15 is a leather heel piece, nailed or otherwise secured to the piece 13, and which may be readily removed and replaced when worn.

When constructed and arranged in accordance with the foregoing description my improved spring heel will be found very effective in use. The spring 12 may be of such resistance as to conform to the weight of the wearer, and being interchangeable, there is no difficulty in substituting one spring for another. The rubber ring 11 not only supplements the action of the metallic spring, but serves as a packing to exclude moisture from the interior of the heel, and permits the heel to conform to the slope of the surface being walked upon. The screws 5, working in the slots 10 accurately guide the parts while being compressed and expanded, as well as holding the upper and lower plates together.

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

1. A spring heel comprising a pair of plates having telescoping projections, said plates being provided with annular grooves, and an elastic ring arranged in said grooves.

2. A spring heel comprising a pair of plates having telescoping projections, said plates being provided with annular grooves, means for limiting the movement of said plates in respect to each other, and an elastic ring arranged in said grooves.

3. A spring heel comprising a pair of plates having telescoping projections, said plates being provided with annular grooves, an elastic ring arranged in said grooves, a spring arranged between said plates, and means for limiting the movement of said plates in respect to each other.

4. A spring heel comprising a plate adapted to be secured to a shoe having a depending rim provided with an annular groove at its edge, a second plate provided with an annular groove at its edge, and having an annular projection extending up-



wardly therefrom between the rim of the first mentioned plate, a spring arranged between said plate and an elastic ring arranged in said grooves.

- 5 5. A spring heel comprising a plate adapted to be secured to a shoe, said plate being provided with a depending rim having an annular groove at its edge, a second plate provided with an annular groove at  
10 its edge, and having an annular projection telescoping up into the rim of the first mentioned plate, a spring arranged between said plate, and an elastic ring arranged in said grooves, and means for limiting the move-  
15 ment of said plates in respect to each other.

6. A heel for shoes comprising a pair of plates having telescoping projections and corresponding grooves in their opposing faces, a ring of rubber arranged in said  
20 groove, one of said plates being provided with a depending rim, and a sectional leather heel secured within said rim.

7. A heel for shoes comprising a top plate and a bottom plate having telescoping pro-  
25 jections, said plate being provided with corresponding grooves in their opposing faces, a ring of rubber arranged in said groove, a coiled spring arranged between

said plates, said bottom plates being provided with a depending rim at its edge and  
30 a piece of leather secured within the rim of said bottom plate, and a leather heel piece secured to said leather piece.

8. A spring heel comprising a plate provided with openings through which screws  
35 are adapted to pass for securing the same to a shoe, said plate being provided with a depending annular rim at its edge having an annular groove, a second plate provided with an annular projection extending up  
40 between the rim of the first mentioned plate, and having slots, said second mentioned plate having an annular groove registering with the groove of the first mentioned plate, an elastic ring arranged in said grooves,  
45 screws extending through the rim of the first mentioned plate into the slot of the projection of the second mentioned plate, a spring arranged between said plates, and a leather heel carried by the bottom plate.  
50

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

ERNEST A. C. SCHOOF.

Witnesses:

PAUL ZIMMER,  
FRED W. EYRE.