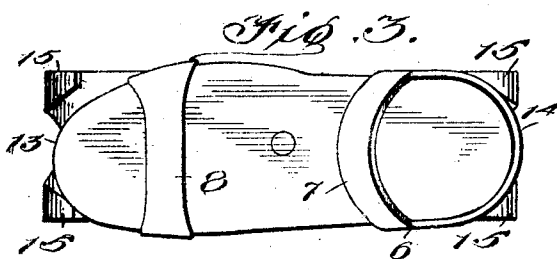
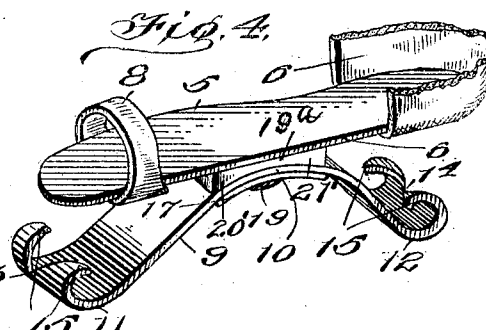
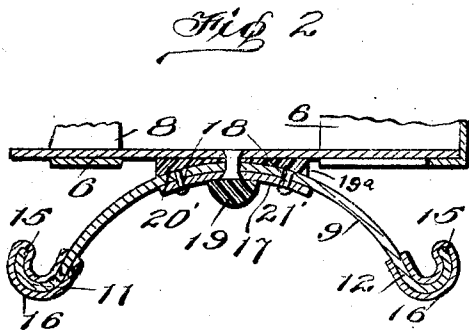
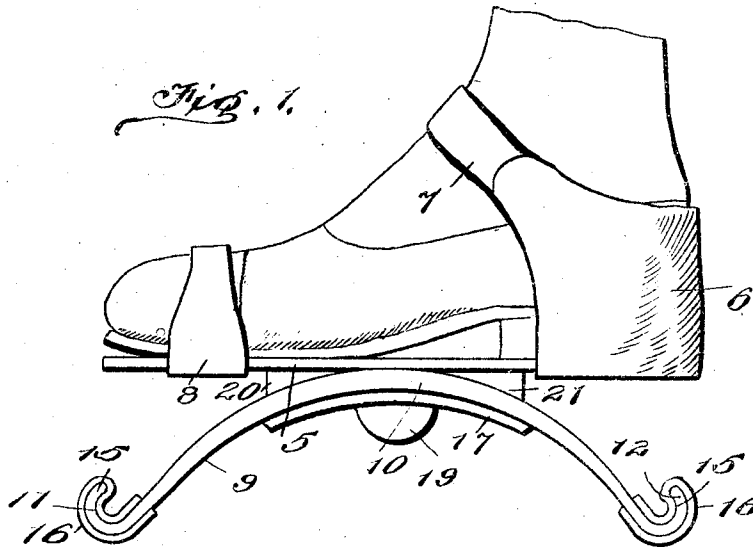


No. 898,084.

PATENTED SEPT. 8, 1908.

H. G. BACKERMANN.  
SPRING.

APPLICATION FILED DEC. 5, 1907.



Witnesses  
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# UNITED STATES PATENT OFFICE.

HENRY G. BACKERMANN, OF YOAKUM, TEXAS.

## SPRING.

No. 898,084.

Specification of Letters Patent.

Patented Sept. 8, 1908.

Application filed December 5, 1907. Serial No. 405,234.

*To all whom it may concern:*

Be it known that I, HENRY G. BACKERMANN, a citizen of the United States, residing at Yoakum, in the county of Dewitt and State of Texas, have invented certain new and useful Improvements in Springs, of which the following is a specification.

This invention relates to springs, and more particularly adapted to foot wear for the purpose of facilitating movements of the body while walking, running or jumping, and has for its object to provide a spring of this character with means whereby it may be easily and conveniently attached to the foot of the wearer.

Other objects and advantages will be apparent from the following description and it will be understood that changes in the specific structure shown and described may be made within the scope of the claims without departing from the spirit of the invention.

In the drawings forming a portion of this specification, and in which like numerals of reference indicate similar parts in the several views, Figure 1 is a side elevational-view of the present invention showing the same applied to the human foot. Fig. 2 is a vertical longitudinal sectional view, of a slightly modified form of the invention. Fig. 3 is a top plan view, Fig. 4 is a perspective view of the form of the invention shown in Fig. 2.

Referring now more particularly to the drawings, there is shown a foot engaging plate 5, and this plate is provided with a heel plate 6 which is provided with an ankle strap 7, as shown. The plate 5 is further provided with a toe engaging strap 8. The plate 5 is provided with a leaf spring 9, and this spring is bent to form the portion 10 which is spaced from the ground, and this spring is bent at its forward and rearward ends to form portions 11 and 12 respectively which are arranged to engage the ground, as shown. The spring 9 has both of its ends 11 and 12 forked as shown at 13 and 14, and arranged upon the prongs 15 of these forked portions there are shown padded feet 16. The feet 16 are preferably of rubber but it will of course be understood that any suitable material may be used.

An auxiliary spring 17 is provided, and this spring is disposed beneath the curved portion 10 of the spring 9, as shown, and this spring is secured to the spring 9 by fastening

devices 18. A concussion pad 19 is secured beneath the spring 17, and by means of this pad it will be seen that the same will be engaged by the ground if the spring 9 should be forced downward suddenly.

In the form of the invention shown in Fig. 1, rubber blocks 20 and 21 respectively are disposed between the foot plate 5 and the spring 9, and these blocks are thus arranged to assist in the action of the spring 9. The blocks further provide a yielding movement of the plate 5 at the toe and heel portion thereof.

In the form of my invention shown in Figs. 2 and 4, a block 19<sup>a</sup> having enlarged end portions 20' and 21' respectively is disposed between the plate 5 and the spring 9.

What is claimed is:

1. A device of the class described comprising a leaf spring having surface engaging portions at each end and a portion at the center extended upwardly, an auxiliary spring secured to the first named spring, a foot engaging plate secured upon the upper face of the first named spring, clamping straps carried by the plate, a cushioning block disposed between the first named spring and the foot engaging plate, and padded feet carried by the spring and arranged at the ends thereof.

2. A device of the class described comprising a leaf spring bent to form surface engaging portions, a concussion pad carried by said spring and located between its ends, an auxiliary spring carried by said first named spring, a foot engaging plate carried by said leaf spring, and a yieldable block disposed between said leaf spring and said foot engaging plate.

3. A device of the class described comprising a leaf spring, bent to form surface engaging portions, a concussion pad carried by the spring and located between its ends, an auxiliary spring carried by the first named spring, foot engaging means carried by the leaf spring, and cushion means disposed between the leaf spring and the foot engaging means.

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

HENRY G. BACKERMANN.

Witnesses:

J. W. VANHAM.

J. E. LANDER.