Dec. 22, 1925.

1,566,513

T. W. THACKERY

SPRING SHOE

Filed May 31, 1924

Fig 1

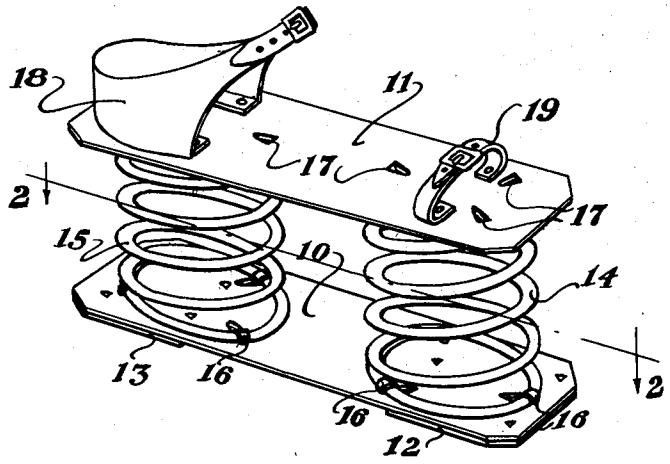


Fig 2

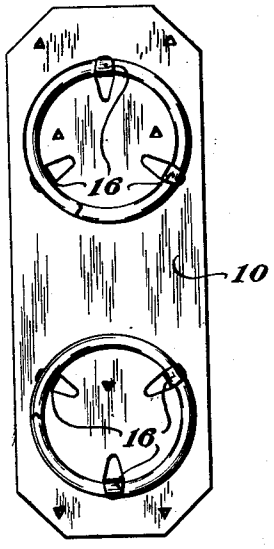
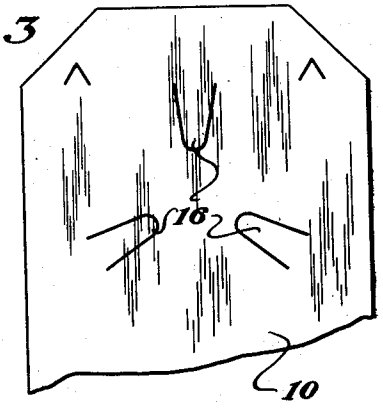


Fig 3



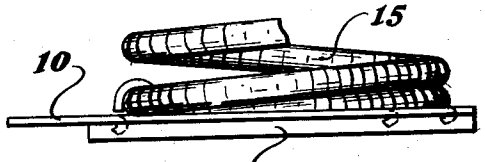


Fig 4

INVENTOR.

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BY

ATTORNEY

Patented Dec. 22, 1925. 1,566,513

UNITED STATES PATENT OFFICE.

THOMAS W. THACKERY, OF WINNETKA, ILLINOIS.

SPRING SHOE.

Application filed May 31, 1924. Serial No. 716,974.

To all whom it may concern:

Be it known that I, THOMAS W. THACKERY, a citizen of the United States, residing at 594 Elm Street, Winnetka, in the county of Cook and State of Illinois, have invented new and useful Improvements in Spring Shoes, of which the following is a specification.

The present invention relates to a novel foot gear and has to do particularly with a device possessing the novelty essential to a toy and at the same time having a decided utility in aiding walking.

Among the objects of the invention are the provision of a spring actuated shoe of improved yet simplified construction, the arrangement of spring members in association with the foot to provide accentuated spring effect, the provision of novel means for associating springs with plates comprising a part of the device, the provision of a novel plate construction, and means for joining said plates and the springs intermediate said plates.

These and such other objects as may hereinafter appear are obtained by the novel construction, combination and arrangement of the various elements of the device, all of which are fully illustrated in the accompanying single sheet of drawing, in which—

Figure 1 is a perspective view of an embodiment of the invention;

Figure 2 is a horizontal section on the line 2—2 of Figure 1;

Figure 3 is a fragmentary plan view of one of the blanks for forming said shoe; and

Figure 4 is a detail, in elevation, of one end of the bottom plate of said shoe.

Like reference characters are used to designate similar parts in the drawing and in the description which follows:

In the embodiment of the invention disclosed in Figure 1, 10 and 11 are respectively bottom and top plates, ordinarily stamped from sheet metal and identical in the form of blanks. Upon bottom plate 10, and on the under surface thereof are two replaceable treads, tread 12 at the front of the shoe, and tread 13 at the rear thereof. Said treads 12 and 13 may be leather, rubber or other desirable material, and any suitable fastening means may be employed for attaching said treads to the plate 10.

Intermediate plates 10 and 11 are front and back, coil springs 14 and 15, of suitable strength and resiliency and proportioned with respect to the use to which the shoe is to be put, whether for a small child or for a youth or a grown-up.

Said springs 14 and 15 are joined to plates 10 and 11 by a plurality of V-shaped ears, the ears in plate 10 being designated 16 and those in plate 11 have the numeral 17 to identify them, the only difference therebetween being that ears 16 are upwardly directed and ears 17 are downwardly pointed. Each ear comprises a pointed or V-shaped portion of the material of the plates (10 or 11) stamped therefrom in a series somewhat in circular configuration as indicated in Figure 3, the pointed end of such material being bent outwardly and over the end sections of springs 14 and 15. In this manner, said springs are securely clamped to plates 10 and 11.

Top plate 11 is supplied with means for attaching the device to the foot, such means comprising a heel strap or brace 18 and a toe strap 19, each with an adjusting buckle and formed after the fashion of similar straps upon roller or ice skates.

Following the assembly of the device, it is ready for use. It is placed on the foot just as a roller or ice skate. The user may walk, run or jump. A novel spring sensation and actuation is produced and the rebound of the spring is most marked in running or jumping. As much as an eighteen inch projection upwardly is obtainable from the usual five inch compression of the springs. Walking is rendered less tiresome than with ordinary shoes.

It will be noted that the plates 10 and 11 are substantially straight and do not conform to the shape of the foot. This not only makes it unnecessary to have right and left foot plates, all plates being of the same configuration, but reduces the cost of manufacture and assembly. The rectangular configuration further avoids the possibility of turned-over or twisted ankles.

Springs 14 and 15 are of large diameter, and of greater diameter than the breadth of the foot of the user. Extending as they do to the edges (or substantially to the edges) of plates 10 and 11, said plates are always in alignment and possess the property of having the upper plate constantly in a horizon-

tal position. This prevents undue strain upon the ankles of wearer for the normal position of the plate 11 is parallel to the ground.

I claim:

1. A spring shoe comprising superposed plates, intermediate springs at the front and back of said plates, means for fastening the uppermost of said plates to the foot, said plates being formed from identical blanks and provided with ears for gripping said springs, said ears on opposite adjacent plates being bent in opposite directions to grip said springs.

2. A spring shoe as described in claim 1, and in which said springs are of a diameter substantially equivalent to the major transverse dimension of said plates.

3. A spring shoe comprising superposed flat plates intermediate identical springs at the front and back of said plates, and means for fastening the uppermost of said plates to the foot, and in which said plates are of substantially the same width and are separated by springs having a diameter substantially equal to the major transverse dimension of said plates. said springs being secured to said plates by a plurality of ears, the ears on opposite adjacent plates being bent in opposite directions to grip said springs.

THOMAS W. THACKERY.