July 31, 1928. 1,679,046

E. MENEFEE

SPRING SHOE AMUSEMENT DEVICE

Filed March 2, 1926

Fig. 1.

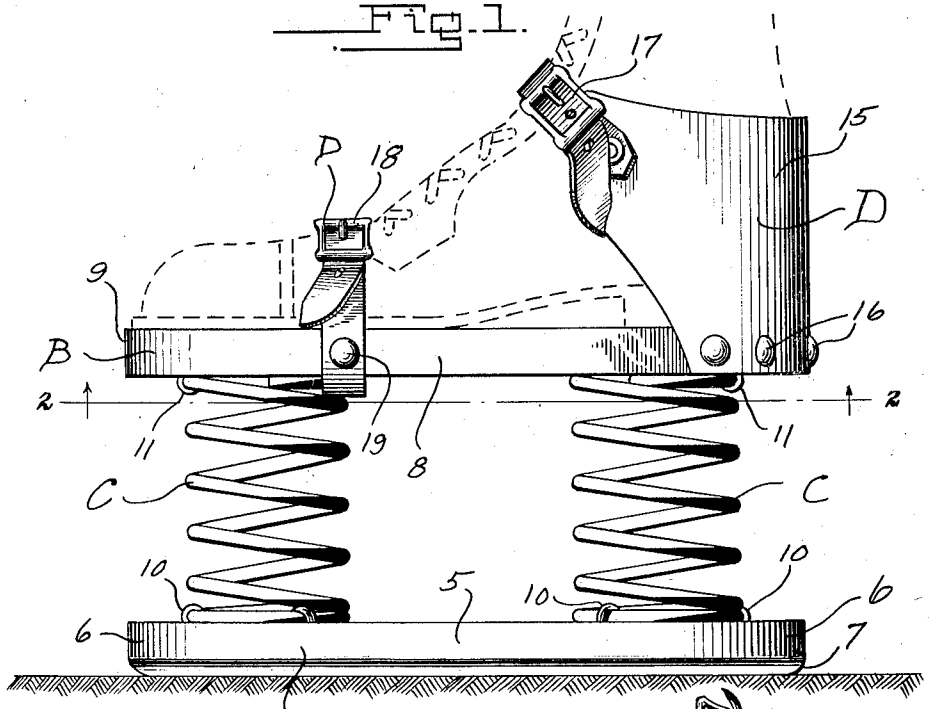


Fig. 2.

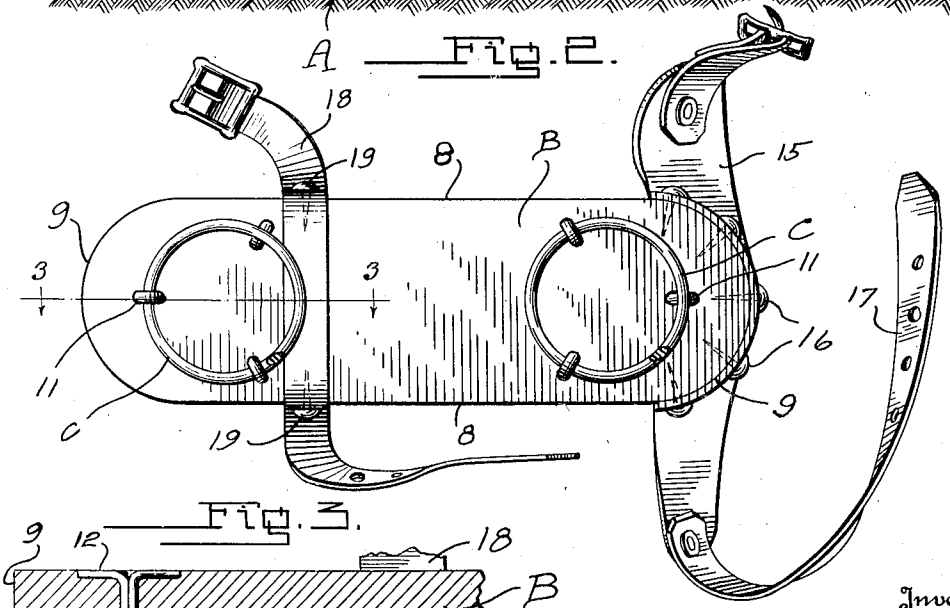
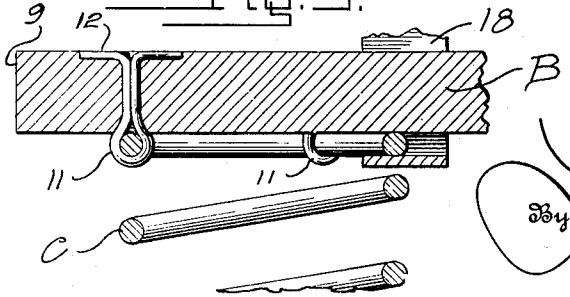


Fig. 3.



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SPRING-SHOE AMUSEMENT DEVICE.

Application filed March 2, 1926. Serial No. 91,794.

The present invention relates to improvements in amusement devices, and has for its primary object, to provide a device in the form of a spring shoe adapted to be attached to one's feet, and which will incite a springing movement to the wearer when walking, running, or performing various other exercises.

A further object of the invention is to provide a spring shoe amusement device embodying a pair of superposed plates supported one above the other by resilient supporting members, the plates being of identical outline in plan, and with the plate so constructed as to permit of reversal of the device for permitting of either of the plates serving as the base plate of the device.

A further object of the invention is to provide an improved amusement device in the form of a spring shoe, embodying an upper plate of identical construction at each of its ends, with foot attaching means so connected with the upper plate as to permit of the same being interchanged end for end of the upper plates.

Other objects and advantages of the invention will be apparent during the course of the following detail description, taken in connection with the accompanying drawing forming a part of this specification and in which drawing:

Figure 1 is a side elevation of one of the improved spring shoes and showing the same in position upon the foot of a wearer.

Figure 2 is a longitudinal section on line 2—2 of Figure 1 and looking upwardly in the direction of the arrows.

Figure 3 is an enlarged fragmentary sectional view on line 3—3 of Figure 2.

Referring to the drawing in detail, and wherein similar reference characters designate corresponding parts throughout the several views, the letters A and B designate respectively spaced base and top plates, C resilient means for supporting of the top plate B in superposed relation above the plate A, and D foot attaching means carried by the plate B.

The plates A and B, and which are preferably formed of wood, are of identical outline in plan, and each being formed with flat upper and lower surfaces as illustrated in Figure 1. These plates A and B, and which are of elongated formation, may be made of various lengths in accordance with the size of the shoe to which the device is to be attached.

Referring particularly now to the base plate A, the same is formed with straight side walls 5 which extend in parallel relation to one another, while each end of the plate is formed with arcuate end walls 6 having their arcs of curvature equal to one-half the width of the plate. These walls 5 and 6 extend in a vertical plane or at a right angle to the upper and lower surfaces of the plate. The lower edges of the walls 5 and 6 may curve into the bottom surface of the plate as at 7 for eliminating the sharp edges at the bottom portion of the plate which might cause the plate to hang when being used.

Referring now to the upper or top plate B, and which as before stated is of identical outline in plan as that of the base plate A, the same is provided with straight parallel side walls 8 and arcuate end walls 9 of equal radius to one another. As will be clearly seen in Figure 1, the plates A and B are formed relatively thick.

Referring now to the resilient supporting means C, the same consists of a pair of coil springs arranged equi-distant from each end of the plates, and which coil springs have their lower ends resting upon the upper surface of the base plate centrally of the longitudinal axis thereof, and have their upper ends engaging the under surface of the top plate and with the axis of the coil springs arranged at the longitudinal center of the top plate. Connected about the lowermost convolution of each spring, are cotter pins 10 which extend downwardly through the base plate A and may have their ends spread as do the cotter pins 11 connected with the uppermost convolution of the springs and which extends upwardly through the top plate as clearly illustrated in Figure 3. As will be observed in Figure 3, the convolution of the springs extend through the eye of the cotter pin at one face of the plate, and the ends 12 of the cotter pin are spread in opposite directions against the opposite face of the plate. By so providing three or more of these cotter pins about the terminal convolutions of the spring it will be seen that the springs are effectively and efficiently held in proper relation to the plates A and B. In use, it will be seen that the spread ends of the cotter pins 10 will engage the sur-

face upon which the person is walking or jumping, and thus tend to further spread the points and draw the lowermost convolutions of the springs into still firmer contact with the upper surface of the base plate. It will of course be understood that various sized springs may be employed in accordance with the weight of the person using the device.

Referring now to the foot attaching means D, the same embodies a heel counter 15 formed of leather or such similar material, and it is intended to be secured at its lower portion to one arcuate end wall 9 of the top plate, as by means of suitable driven or screw threaded fastening elements 16, and which fastening elements in the example shown are passed through the lower portion of the heel counter into the vertical arcuate end wall of the plate. An adjustable ankle strap 17 is connected with the heel counter 15 for positioning about the instep of the wearer. An adjustable toe strap 18 passes beneath the top plate B adjacent the opposite end of the plate from the heel counter 15, and through which driven or screw threaded fastening elements 19 may extend into the side walls 8 for preventing separation of the toe strap from the plate when the device is removed from the foot of the wearer.

The object in so forming each end of the plate B of identical formation, and so detachably connecting the foot attaching means to the plate, is to permit of the heel counter and toe strap being interchanged end for end of the plate should the base plate A become worn, or should the tension of either of the springs change so as to cause it to be desirable to have the heel of the person wearing the device disposed at the opposite end of the top plate. It will be readily apparent that the spring disposed under the heel portion of the wearer will receive more strain than the spring arranged under the toe of the wearer, and which weakening of the rear spring would deem it desirable to reverse the foot attaching means of the device so as to have the heel of the wearer disposed above the spring of greatest strength. It will also be possible to reverse the plates A and B, that is, dispose the plate B lowermost, and attach the foot attaching means to the plate A should the base plate become worn to an undesirable degree, since the plates A and B are of identical outline in plan, and the springs are arranged equi-distant inwardly from each end of the plates.

It will of course be understood that two of the devices will be worn, and by reason of the fact that each of the devices will be formed identical, the same may be worn on either foot of the person wearing the devices.

From the foregoing description it will be apparent that a novel spring shoe construction has been provided embodying a pair of superposed plates of identical outline in plan, with resilient means interposed between and connected to the plates at like distances from each end of the plates, and with foot attaching means which may be interchanged end for end of the device to permit of either end of the device constituting the front portion of the spring shoe.

Changes in detail may be made to the specific form of the invention herein shown and described, without departing from the spirit of the invention or the scope of the following claim.

I claim:

A device of the class described comprising a pair of superposed plates, the uppermost plate being provided with parallel side walls and arcuate end walls of equal radius, coil springs disposed between the plates and disposed equi-distant inwardly from each end of the plates, a flexible heel counter detachably connected at its lower portion with one arcuate end wall of the upper plate and interchangeable to the opposite arcuate end wall, an adjustable ankle strap carried by the heel counter, and a toe strap extending transversely beneath the upper plate and secured to the side walls thereof.

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