To all whom it may concern:

Be it known that I, John Charles Keller, a citizen of the United States, and a resident of Chicago, in the county of Cook and State of Illinois, have invented a new and useful Improvement in Pneumatic Footwear Constructions, of which the following is a full, clear, and exact description.

My invention relates to improvements in pneumatic footwear construction, and it consists in the combinations, constructions, and arrangements herein described and claimed.

An object of my invention is to provide a device of the character described by means of which a high degree of resiliency is provided for the heel portion of the ordinary type of shoe.

A further object of my invention is to provide a device of the character described in which means is provided for varying the degree of resiliency of the heel portion of the shoe at will to suit the weight of the person wearing the shoe.

A further object of my invention is to provide a device of the character described which greatly decreases the weight of the heel portion of the shoe, thereby decreasing fatigue of the wearer from continued walking or standing. My improved footwear construction is especially desirable for persons who are required to stand on their feet during most of the day, such as clerks, conductors, policemen, and the like.

A further object of my invention is to provide a device of the character described that is extremely simple in construction, durable, and thoroughly practical commercially.

Other objects and advantages will appear in the following specification, and the novel features of the invention will be particularly pointed out in the appended claim.

My invention is illustrated in the accompanying drawings forming a part of this application, in which:

Figure 1 is a sectional view of an embodiment of my invention, and

Figure 2 is a section along the line 2—2 of Figure 1.

In carrying out my invention I make use of the ordinary type of shoe 1 having a sole 2. The solid heel, either rubber or leather, is removed from the sole 2 and my improved heel substituted therefor.

This heel consists in a hollow vulcanized rubber body member 3 having a valve 4 similar to the ordinary type of pneumatic tire valve projected through one of its side walls 5.

This valve 4, unlike the ordinary type of valve, however, has internal threads 6 for engaging with an air hose, in place of external threads found on the ordinary type of valve. The valve 4 does not project more than a fraction of an inch beyond the wall 5 of the body member 3.

The lower portion 7 of the body member 3 is constructed of especially tough vulcanized rubber suitable to resist wear by friction upon the pavement, while the upper part of the body member is constructed of a soft quality of rubber, highly resilient. Openings 8 (see Figure 2) are provided through the body member 3 by means of 75 which rivets 9 may be employed to secure the body member to the sole 2 of the shoe, shown in Figure 1.

From the foregoing description of the various parts of the device, the operation thereof may be readily understood. The ordinary type of tire pump is employed for inflating my improved pneumatic heel, and when the proper pressure has been attained the shoes may be placed upon the feet of the wearer, and inspected from time to time so as to maintain the proper inflation thereof. The valve 4 is tight and pressure ought not to vary for months of wear.

Due to the extreme lightness in the construction of the body member 3, i.e., the portion thereof containing air, the person wearing the shoe will note a marked ease with which walking is accomplished, also elimination of practically all shocks and vibrations ordinarily imparted to the feet of the person wearing shoes with the ordinary type of solid heel.

I claim:

The combination with a shoe having a sole, of a hollow heel member secured to said sole, said heel member having its bottom wall constructed of a tough, vulcanized material and vulcanized to the remaining portions, the remaining wall portions being highly resilient, and a valve projected through one wall of said heel member, said valve being constructed to lie flush with the exterior surface of the adjacent wall.

John Charles Keller.