W. METZROTH.

ADJUSTABLE SHOCK ABSORBING FOOT.

APPLICATION FILED JUNE 30, 1910.

997,842. Patented July 11, 1911.

Fig. 1

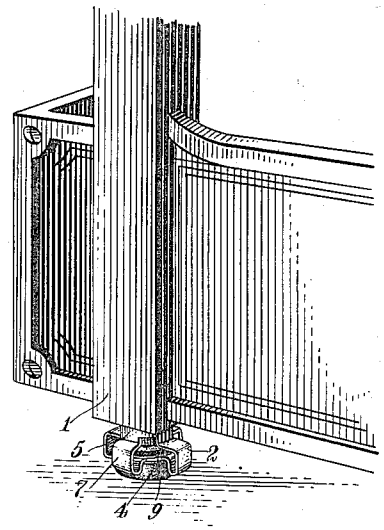


Fig. 2

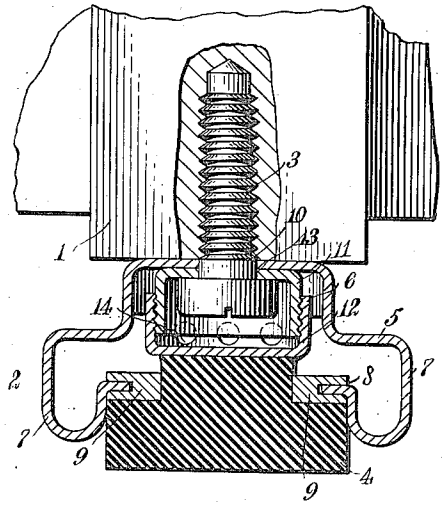
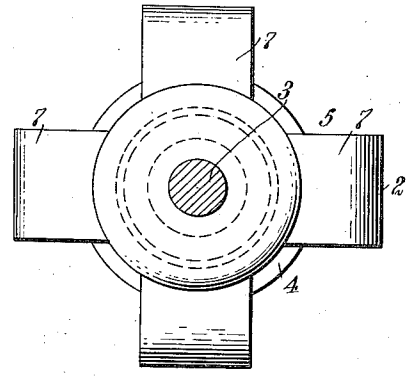


Fig. 3



WITNESSES:
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WILLIAM METZROTH, OF MIDDLETOWN, CONNECTICUT.

ADJUSTABLE SHOCK-ABSORBING FOOT.

997,842. Specification of Letters Patent. Patented July 11, 1911.

Application filed June 30, 1910. Serial No. 569,682.

To all whom it may concern:

Be it known that I, WILLIAM METZROTH, a citizen of the United States, and a resident of Middletown, in the county of Middlesex and State of Connecticut, have invented a new and Improved Adjustable Shock-Absorbing Foot, of which the following is a full, clear, and exact description.

This invention relates to a shock-absorbing foot to be used on typewriters, cash registers, or articles of furniture where it is desired to prevent the surface on which the article rests from being marred, and where it is further desired to take up the shock incident to the operating or moving of the article, and deaden the sound thereof.

An object of this invention is to provide a device which will be simple in construction, inexpensive to manufacture, strong, durable, resilient in its action, and adjustable.

A further object of this invention is to provide a sound-deadening foot which will yield to the shock placed thereon, and which may be adjusted within certain limits.

These and further objects, together with the construction and combination of parts, will be more fully described hereinafter and particularly set forth in the claims.

Reference is to be had to the accompanying drawings forming a part of this specification, in which similar characters of reference indicate corresponding parts in all the views, and in which—

Figure 1 is a fragmentary perspective view showing my device attached to the frame of an article such as a typewriter; Fig. 2 is a fragmentary view in elevation, partly in section; and Fig. 3 is a horizontal section.

Referring more particularly to the separate parts of the device, 1 indicates the frame, which may be a leg or any other suitable portion of the article, to which is secured one or more, preferably a plurality, of feet 2, by any suitable means, such as a screw 3.

The foot 2 preferably consists of a base pad 4 of any suitable resilient sound-deadening material, such as rubber, a yielding member 5 in the form of a spider spring composed of any suitable material, such as spring steel nickel-plated to give a nice finish, and an adjuster 6 of any suitable material, such as brass nickel-plated similar to the yielding member 5.

The yielding member 5 preferably is in the form of a spider having a plurality of arms 7, preferably four in number, which extend from the different sides of the spider and engage at their ends in one or more grooves 8 formed in a metallic ring 9, preferably of nickel-plated brass, suitably mounted on the pad 4. The spider 5 is further provided with an opening 10, whereby it is threaded onto the fastening member 3 and secured to the frame 1.

The adjuster 6 preferably consists of telescoping members 11 and 12, in the form of two caps having an adjustable screw-threaded engagement with each other. One of these members, 11, is provided with an opening 13, whereby it is also threaded onto the fastening member 3.

For the purpose of adjusting the members 11 and 12 relative to each other, one of them, as indicated in the drawings, the member 12, is provided with a plurality of openings 14, in which may be inserted any suitable tool, such as a pin lever. The adjuster 6 is located intermediate the under side of the top of the spider and the top of the foot pad 4.

The operation of the device will be readily understood when taken in connection with the above description. It will readily be seen that the article in itself will form a very neat shock-absorber and sound-deadener for any vertical strain placed thereon, no matter what type of article it is attached to. Then again, if it is attached to a typewriter, it will absorb the shock and deaden the sound of shifting the carriage at the end of a line. In this connection, the foot is preferably set as illustrated in Fig. 1, so that the front and rear spider arms will slide in the groove or grooves 8, and the side arms will yield to the shock. If it is desired to vary the tension of the spider spring arms 7, it is merely necessary to rotate one of the members 11 and 12 relative to the other member.

While I have shown one embodiment of my invention, I do not wish to be limited to the specific details thereof, but desire to be protected in various changes, modifications and alterations which may come within the scope of the appended claims.

Having thus described my invention, I claim as new and desire to secure by Letters Patent:—

1. The combination with a frame, of a

spring having a plurality of arms secured to said frame, a base-pad, and an indurated ring on said base-pad, having a groove therein, the ends of said spring arms being slidingly mounted in said groove so as to permit a relative movement of said pad with respect to said frame, and also to permit a relative movement of said pad with respect to said arms.

2. The combination with a frame, of an integral spider spring having a plurality of arms and a central opening, a fastening member adapted to be inserted through said opening for the purpose of securing said spring to said frame, a pad, and an indurated member having a channel therein, secured to said pad and adapted to receive said arms in said channel so as to permit a relative vertical movement of said pad and said frame and a relative transverse movement of said pad with respect to some of said arms.

3. The combination with a frame, of an integral spider spring having a plurality of arms and a central opening, a fastening member adapted to be inserted through said opening, for the purpose of securing said spring to said frame, a pad, an indurated member having a channel therein, secured to said pad and adapted to receive said arms in said channel so as to permit a relative vertical movement of said pad and said frame and a relative transverse movement of said pad with respect to some of said arms, a cap having a central opening through which said fastening member extends and having a screw-threaded periphery, and a cap having a screw-threaded engagement with said screw-threaded periphery and abutting against said pad, said caps forming an adjuster for varying the tension on said spring.

4. The combination with a pad, of a spring having a plurality of arms disposed in angular relation with respect to each other and adapted to adjustably engage said pad, whereby a relative horizontal movement of said pad and said spring may be taken up by the sliding action of some of said arms and by the springing action of others of said arms.

5. The combination with a spring having a plurality of resilient arms, of a pad connected to said spring in such a manner as to have a sliding movement relative to some of said arms in one direction and a sliding movement relative to others of said arms in a direction transverse to said first-mentioned direction, and an adjuster for varying the tension on said spring.

6. The combination with a frame, of a spring connected to said frame, a pad, and a member connected to said pad, having a groove therein, said spring having freely-projecting arms engaging at their ends in said groove, so as to permit a relative movement of the ends of said arms and said pad, when in active use, said spring arms being bent so as to yield and permit said pad and said frame to yieldingly move toward and from each other.

7. The combination with a frame, of a spring connected to said frame, a pad, a member connected to said pad, having a groove therein, said spring having freely-projecting arms engaging at their ends in said groove, so as to permit a relative movement of the ends of said arms and said pad, when in active use, said spring arms being bent so as to yield and permit said pad and said frame to yieldingly move toward and from each other, and an adjuster interposed between said pad and said spring, to vary the tension on said spring.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

WILLIAM METZROTH.

Witnesses:
JOHN B. CONE,
ALBERT E. RISLEY.