E. BALTZLEY.

SOUND ABSORBING DEVICE FOR TYPE WRITERS.

APPLICATION FILED JULY 1, 1907.

956,618. **Patented May 3, 1910.**

Fig. 1.

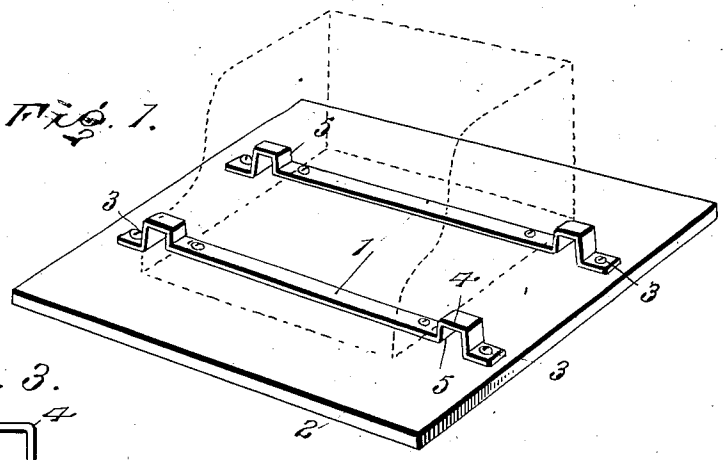
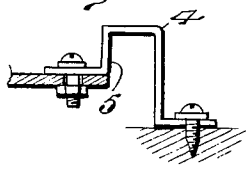


Fig. 3.



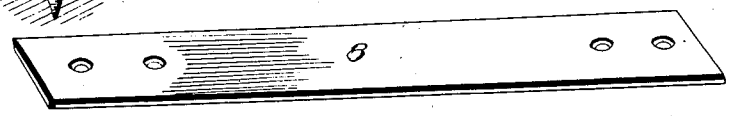


Fig. 2.

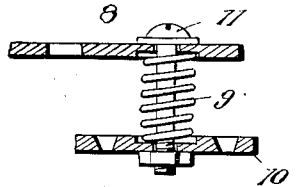


Fig. 4.

Fig. 5.

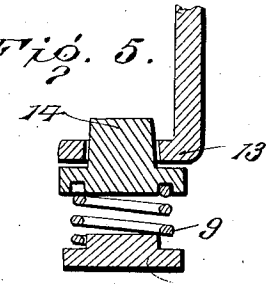


Fig. 6.

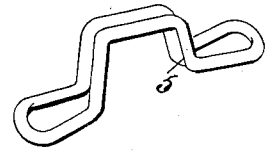


Fig. 8.

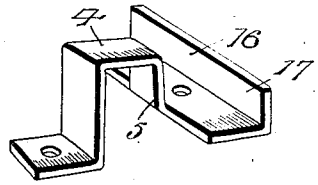


Fig. 9.

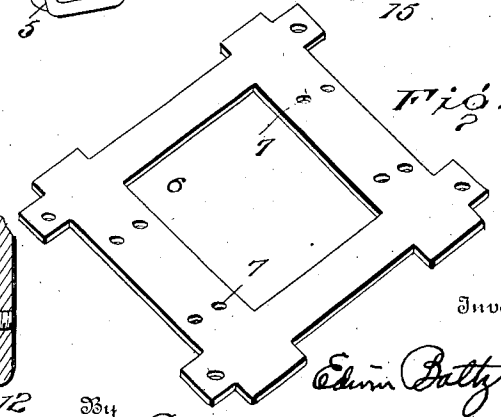
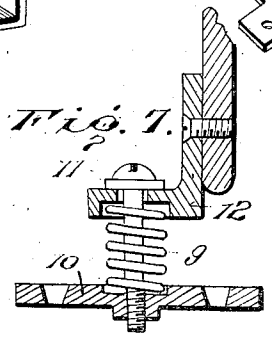


Fig. 7.



Witnesses

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SOUND-ABSORBING DEVICE FOR TYPE-WRITERS.

956,618. Specification of Letters Patent. Patented May 3, 1910.

Application filed July 1, 1907. Serial No. 381,708.

To all whom it may concern:

Be it known that I, EDWIN BALTZLEY, of Glen Echo, in the county of Montgomery, and in the State of Maryland, have invented certain new and useful Improvements in Sound-Absorbing Devices for Type-Writers, and do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings, in which—

Figure 1 is a perspective view of one embodiment of my invention; Fig. 2 is a perspective view of the typewriter supporting member of another form of my invention; Fig. 3 is a detail view in vertical section of a portion of the form of my invention in which the part shown in Fig. 2 is employed; Figs. 4 to 8, inclusive, are detail views of other embodiments of my invention; and—Fig. 9 is a perspective view of a frame adapted for use with my invention for typewriters whose bases are of different size.

As is very well known, the operation of typewriters results in a degree of noise, produced by the manipulation of the keys and the movement of the paper carriage, that is seriously objectionable, and though efforts have been made to prevent or reduce this noise, they have been only partially successful.

The object of my invention is to get rid of the noise produced in operating typewriters, to a much larger degree than has been possible by the devices hitherto used, and to this end—

My invention consists in the sound absorbing means constructed substantially as hereinafter specified and claimed.

I have found that all the noise produced by the operation of a typewriter can be practically eliminated by interposing between the machine and the desk or stand on which it is mounted a spring support of such construction as to permit slight vertical movement of the typewriter under the impact of blows struck by its keys, and thereby prevent the transmission of the blow to the desk with resulting noise, the blow being taken up or absorbed by the spring support, and so that the typewriter will move laterally slightly under the shock of the longitudinal movement of the paper carriage, a jar or blow to the desk or stand from this cause being avoided by being absorbed or taken up in the spring support. This spring support may be given various forms for the attainment of my purpose, but an excellent arrangement is illustrated in Fig. 1, where it consists of a pair of metal strips 11 to which the typewriter is attached, and which at each end is attached to the top 2 of the desk or stand, by means of screws or bolts 3 between which ends and the portion on which the typewriter rests the strip is bowed or bent in an inverted U-shape form 4, the leg 5 of the U next the typewriter being shorter than the other, so that the portion of the strip on which the typewriter rests is supported above the surface of the desk, without any likelihood of its coming into contact therewith. By reason of the bends or U-shapes, as described, the typewriter will be supported above the desk top, so that it may have a slight up-and-down, as well as a longitudinal, movement. I prefer the form of bend shown wherein the legs and cross-piece stand at a right-angle to each other, as I have found that admirable results are obtained by this particular form or shape of the bend, but, of course, I do not limit myself to such or any particular construction of my spring support. All that is necessary is that the latter be of such construction as to permit vertical and sidewise movement of the typewriter under the shocks or blows administered to it in operating it, whereby such shocks or blows are prevented from being transmitted to the supporting desk or table.

Instead of the one-piece device shown in Fig. 1, the springs at each end of the metal strip may be unconnected, and each directly attached to the frame of the typewriting machine, and as shown in Fig. 6 the springs may be made of wire bent into proper shape.

To adapt my spring support so that the same support may be fitted for use with frames whose bases are of various sizes, I employ, as shown in Fig. 9, a rectangular frame or plate 6, which is attached to individual springs, such as those shown in Fig. 3, the plate being thereby yieldingly supported above the leaf and upon it is placed the typewriting machine. Said plate is provided with an assortment of holes 7 to suit the base of frames of different sizes.

As shown in Fig. 2 a metal strip 8 may be employed, either elastic or inelastic, and at each end a coil spring 9 (Fig. 4) may be interposed between it and the leaf or other

support, the coil spring permitting vertical, as well as horizontal, movement of the typewriter. The end of spring 9 opposite that engaging plate 6 bears against the plate 10, provided with holes for its attachment to the leaf, and a bolt 11 connects the two plates and passes through the coil spring 9. In Fig. 7 a construction similar to that shown in Fig. 4 is illustrated, excepting that the plate 8 is omitted, and in place thereof, a foot 12, which is attached to the typewriting frame, is employed; and in Fig. 5 the coil spring is shown adapted to a typewriter whose frame is provided with a foot 13, in which instance the foot has a hole in which is seated the shank of a button 14, between which button and a bearing piece 15 the spring 9 is interposed. The bearing piece 15 has contact with the desk top.

As shown in Fig. 8 the spring device is the same as that illustrated in Figs. 1 and 3, excepting that each spring device is independent of another, two not being connected in pairs by a cross bar, but each having a foot 16 and an upturned flange 17 to receive directly the base of the typewriter.

While my invention has been designed especially for typewriters, I, of course, do not restrict myself to its use with typewriters, as it may be used with other machines presenting the conditions that a typewriter does in respect to the matter of noise.

Having thus described my invention, what I claim is:—

1. In a typewriter attachment for absorbing the shock and sound of the type bars and carriage of the typewriter, a loop made of suitable material having vertical and horizontal resilience, means for attaching it to a desk, and means for attaching it to a typewriter.

2. In a typewriter attachment for absorbing the shock and sound of the type bars and carriage of the typewriter, a metal loop having vertical and horizontal resilience, means for attaching it to a desk, and detachable means for attaching it to a typewriter.

3. A sound absorbing supporting device for typewriters, comprising typewriter and desk engaging members, and the device being bent between such members vertically and horizontally to form legs of unequal length, the longer leg being connected to the desk engaging member.

4. A supporting device for typewriters, consisting of a metal strip bent at its ends to form legs of unequal length at each end, the longer leg being the desk engaging part.

In testimony that I claim the foregoing I have hereunto set my hand.

EDWIN BALTZLEY.

Witnesses:

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F. J. EHLERS.