L. C. MYERS.

SOUND MUFFLING PAD FOR TYPEWRITING MACHINES.

APPLICATION FILED AUG. 22, 1921.

1,419,293.

Patented June 13, 1922.

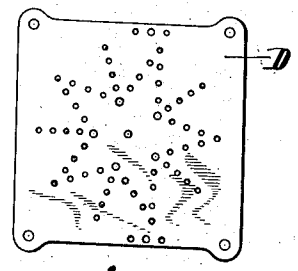


Fig. 6.

Fig. 1.

Fig. 2.

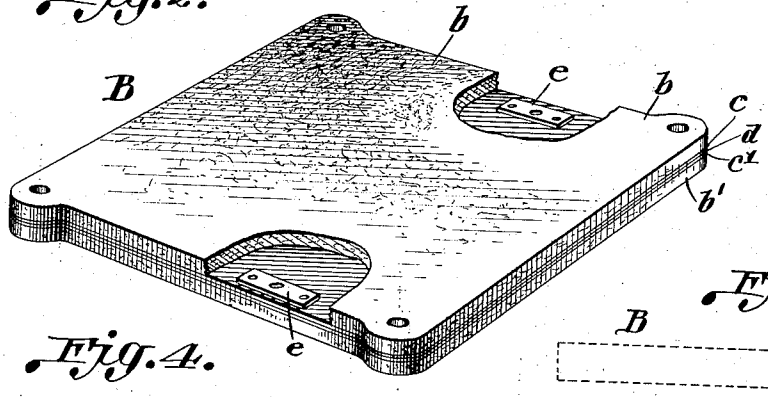


Fig. 4.

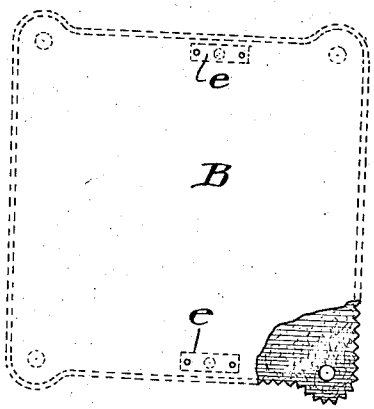
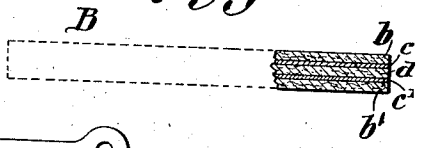


Fig. 3.



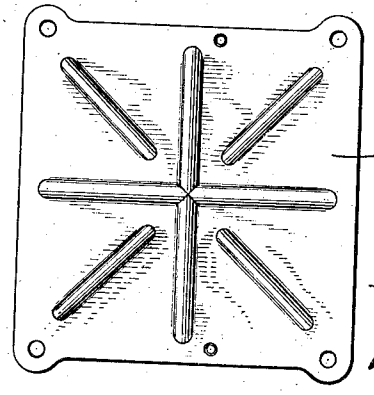


Fig. 5.

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UNITED STATES PATENT OFFICE.

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SOUND-MUFFLING PAD FOR TYPEWRITING MACHINES.

1,419,293. Specification of Letters Patent. Patented June 13, 1922.

Application filed August 22, 1921. Serial No 494,319.

To all whom it may concern:

Be it known that I, LEWIS C. MYERS, a citizen of the United States, residing in Brooklyn, in the county of Kings and State of New York, have invented certain new and useful Improvements in Sound-Muffling Pads for Typewriting Machines, of which the following is a specification.

The object of this invention is to provide means for absorbing shocks and muffling or deadening sounds produced by a typewriting machine while in operation which sounds are, as a rule, transmitted to the desk or table on which the machine is supported and are by such support increased to a very large extent. These sounds are largely produced by the shifting for upper and lower case printing and are responsible for a large part of the noise produced in the operation of the machine.

According to my invention I provide a pad, mat or cushion which is preferably made of such size as to extend entirely across the rear part of the machine behind the key-board, and it is constructed of relatively soft, sound-muffling material reinforced or stiffened with comparatively rigid material. Preferably the pad is provided with means for attaching it to the frame of the machine, and preferably it is equipped with devices for securing it to a desk or table top on which the machine is supported.

My improvements are illustrated in the accompanying drawings, in which—

Figure 1 is a side view of a part of the frame of a typewriting machine to which the pad is attached, and it also shows part of a desk top to which the pad is secured.

Figure 2 is a perspective view of the preferred form of pad, with parts broken away to show details of construction.

Figure 3 is a view in section of the pad illustrated in Figs. 1 and 2.

Figure 4 is a plan view of the pad showing how its edges are preferably formed.

Figure 5 is a plan view of one form of stiffening layer that may be used.

Figure 6 is a plan view of another form of stiffening layer which may be employed.

A part of the side of the frame of a Royal typewriting machine is indicated at A. This frame is formed with feet *a*, as usual, and it will be observed that these feet extend for only a short distance below the edges of the main frame. Usually individual pads are attached to these feet, but according to my invention these individual pads are discarded and the universal pad illustrated is employed. The pad as a whole extends under the entire rear part of the machine where a large part of the noise-producing mechanism is located.

As shown in Fig. 1, the pad is secured to the feet of the frame and is thus firmly connected with it and as is also shown in Fig. 1 the pad is attached to the desk or table top T. In this way sounds produced by the machine are, to a large extent, absorbed or muffled. Various forms of pads interposed between the machine and the support may be employed. It will be observed by reference to Fig. 1 that the feet *a* of the machine extend into depressions in the pad, thus there are no open spaces between the support T and the frame of the machine through which noises could pass and as is well known in the Royal machine panels A′ of glass are employed and thus there are no side openings in the frame.

The details of construction of the pad shown are of importance. The pad embodies in its construction soft material, such as felt, which is a good sound deadener or muffler, and means for stiffening it and holding it in a flat condition, such stiffening means also serving in attaching the pad securely to the machine and to the support.

In the preferred construction a layer of stiffening material, such as wood veneer or metal, is interposed between two layers of felt or similar material. The drawings show two layers of felt *b*, *b′*, two layers of veneer *c*, *c′* and a layer of felt *d* interposed between the layers *c*, *c′* of veneer as this construction has been found to be serviceable and efficient.

A pad having the characteristics above described may be used with a typewriting machine whether it be attached to the frame thereof or to a desk or not. The pad will always lie flat on its support and will properly sustain the machine. The several layers may be connected with each other by cementing material or otherwise, if desired.

When it is desirable to attach the pad to the machine I do so by screws D which extend through holes in the corners of the pad, in the manner shown, and engage

tapped holes in the feet of the machine. When it is desirable to attach the machine to a desk, table or other support, instead of employing metal clamps which engage the machine frame and the desk top, I employ screws or other fastening devices E which extend through the desk top and engage the pad, as shown. Preferably plates *e* are secured to one of the stiffening layers which are formed with tapped bosses *e'* with which the screws E engage. It will thus be seen that by attaching the pad to the machine and then attaching the pad to the desk or table there is no direct metallic connection between the machine frame and its support and therefore sounds are not freely transmitted but are muffled, i. e., are very largely eliminated. In plan the pad is preferably of the shape shown in Fig. 4 and its edges are preferably serrated or pinked as in this way the edges are made more durable.

Instead of using wood veneer for the stiffening material I may employ a sheet metal member C, shown in Fig. 5, and to stiffen this material it may be corrugated, as shown.

In order to reduce the weight of the stiffening material it may be perforated, as is shown in the pad D, Fig. 6.

I claim as my invention:—

1. A sound-muffling pad, comprising a layer of sound-muffling material, a layer of stiffening material, and devices attached to the pad for receiving means for securing the pad to a support.

2. A sound-muffling pad, comprising a layer of sound-muffling material, a layer of stiffening material, and metal plates attached to the stiffening material adapted to receive means for securing the pad to a support.

3. A sound-muffling pad comprising a plurality of layers of sound-muffling material, an interposed layer of stiffening material, means attached to the stiffening material for receiving devices for securing the pad to a support, and means for receiving devices for securing it to a machine.

4. The combination with the frame of a typewriting machine of a sound muffling pad underlying the same, and means adjustably connected to the frame and engaging the pad to force the same into firm contact with the edges of the frame between the corners thereof, thus closing the bottom of the frame.

5. A sound-muffling pad, comprising a plurality of layers of sound-muffling material, a plurality of layers of stiffening material, means engaging the lower layer of stiffening material to fasten the pad to a machine frame, and means engaging the upper layer of stiffening material to fasten the pad to a support.

6. A sound-muffling pad, comprising a plurality of layers of sound-muffling material, a plurality of layers of stiffening material, a layer of sound-muffling material interposed therebetween, means engaging the lower layer of stiffening material to fasten the pad to a machine frame, and means engaging the upper layer of stiffening material to fasten the pad to a support.

In testimony whereof, I have hereunto subscribed my name.

LEWIS C. MYERS.