C. C. LAPHAM.

TYPE WRITER SUPPORT.

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1,245,243. Patented Nov. 6, 1917.

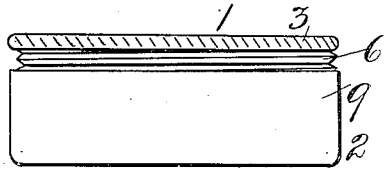


fig. 1.

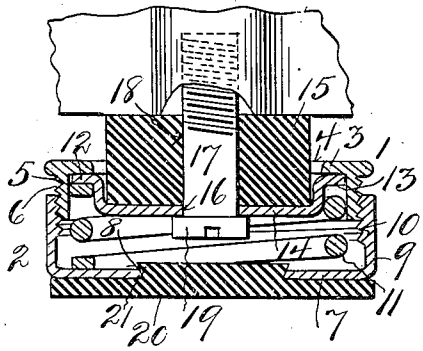


fig. 2.

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TYPE-WRITER SUPPORT.

1,245,243. Specification of Letters Patent. Patented Nov. 6, 1917.

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To all whom it may concern:

Be it known that I, CHARLES C. LAPHAM, a citizen of the United States, and a resident of the city, county, and State of New York, have invented certain new and useful Type-Writer Supports, of which the following is a specification.

My invention relates to supports for typewriters and the principal objects thereof are to eliminate the noise which usually occurs when a typewriter is operated while resting on a base board, table, desk, or other flat wooden or other support; and to relieve the typewriter of shocks due to the operation of its mechanical parts, by forming a resilient spring support which will relieve the shocks but not cause the machine to move laterally or oscillate. One of my principal objects is to produce a device wherein the spring may be placed under more or less compression by adjustable means so that the cushioning action of the device may be adjusted to suit the different touch and other peculiarities of each individual typist. In so far as I am aware no provision has ever been made for this adjustment in typewriter supports, and therefore a device made to suit the peculiarities of one typist has been unsuitable for others having a different "touch." Another object of my invention is to make a device which can be very easily and quickly applied to use, and one which may be attached to the typewriter itself, rather than to the desk or table on which the typewriter is supported; and thus the device moves with the typewriter, as a part thereof. In so far as flexible supports have been put into practice they have been made to be attached to the table or desk, and it was quite difficult and tedious to attach them in such positions as would cause them to register with the rubber legs or studs on the typewriter. If not in proper register, the devices either failed to absorb the shocks altogether or else affected different parts of the machine differently. Also in such devices it was necessary to remove or reposition the supports whenever the machine was to be removed to a different position. In addition to the above, former devices were also objectionable because the desk or table was disfigured by screw holes wherever the devices were attached. Under my present invention the devices may be, and preferably are, attached to the typewriter to be portable therewith; they need have no connection with the desk or table other than mere contact therewith: the typewriter will not sway or oscillate laterally and no special skill or care is required to attach, detach, or adjust, the supports. Another and substantial advantage over devices so far used is that my present device may be made and sold at a much lower price.

In the drawings forming a part of this application,

Figure 1, is an elevation of one of the supports, showing the preferred form, before attachment to a machine,

Fig. 2, is a vertical section through the middle thereof.

My invention in its broad aspect consists in producing supports for different points of the typewriter base, wherein the machine rests upon springs, and wherein adjustment may be made in the spring to adapt the same to machines of different weight, or to suit the particular requirements of each typist.

In Figs. 1, and 2, I have shown an inclosing casing consisting of parts 1 and 2, the former having an annular top 3, open at 4, and a downwardly extending cylindrical portion 5, which is shown threaded exteriorly at 6. The other portion 2, of the casing forms a sort of pocket, consisting of the bottom 7, having a central aperture 8, and a cylindrical portion 9. The cylindrical portion 9, is interiorly screw threaded at 10, to fit over and mesh with the threads 6, of the other casing member.

Within the casing formed by the members 1 and 2, I provide a spring 11, which is preferably of but few turns and comparatively stiff in order that the same may properly cushion the typewriter, but allow of but slight vertically movement of the latter. This spring is inclosed within the casing, resting on the bottom 7, of the lower casing member. Resting on the top of this spring is a movable plate 12, the outer rim 13, of which rests on the spring 11. This plate is preferably depressed or dished at 14, to form a socket of proper size to receive the end of the ordinary rubber leg 15, of the typewriter. There is a central aperture 16, in

the plate 12, for the reception of a screw 17. A number, preferably four, of these devices are attached to the base of the typewriter, preferably so as to be portable therewith and preferably at the points where the usual typewriter legs or studs are located. I prefer to attach the supports to the typewriter so that the rubber legs 15, are made use of, and for this purpose I so place the support the leg 15, is received in the depressed recess 14, of the movable member. A screw 17, is then passed freely through the aperture 8, in the bottom 7, passed through the aperture 16, in the plate 12, then through the usual aperture 18, in the rubber leg 15, and its end is screwed into the usual socket in the typewriter base. The head 19, of the screw contacts with the plate 12, and serves to hold the latter and the leg 15, in close contact, and against the typewriter frame. It therefore serves to hold the entire device on the machine. The screw usually supplied to hold the rubber legs on the typewriter may be used for this purpose.

I prefer to provide a rubber base for the supports in order that no sound will result from contact of the same with the desk and in order that the latter will not become scratched. For this purpose I prefer to employ a disk of rubber 20, having a stud 21, which is depressed into the aperture 8, and held therein by frictional engagement with the bottom 7.

When several of these supports are attached to the typewriter, the weight thereof comes first upon the legs 15, (when these are utilized) thence upon the plate 14, thence upon the spring 11, the bottom plate 7, rubber 20, and then the desk or other structure upon which the machine is placed.

When a typewriter is ordinarily operated there is more or less vibration caused by striking the keys, and by the movement of the key levers and other mechanisms and when no special means are employed to cushion the shocks considerable noise is caused by the operation of the machine. The effect is severe upon the machine, and the "touch" of the machine is very harsh and tiresome to the operator. In the present case however, the shocks are absorbed by the springs 11, which however, are stiff enough to prevent undue vertical movement of the typewriter. The typewriter rests on the springs 11, which absorb the vibrations and relieve the machine of shocks, thereby increasing the life and accuracy thereof. As the parts are here arranged, there is no relative lateral movement between them and therefore the machine will not sway or oscillate when operated, but will simply have such a movement relative to the desk, as to relieve the machine of shocks and prevent noise.

Where the bottom cushion 20, is used there is no metal contact with the desk and therefore the supports will not slide on the desk, nor cause any noise. It is also to be noted that in the device herein shown, the machine is elevated but a very slight extent above where it would come if supported only upon the customary legs 15, which is a decided advantage.

As all machines are not of the same weight, and as all typists do not strike the keys with the same force I provide means for adjusting the spring to suit the various requirements. If the spring 11, in Fig. 2, is not stiff enough for the conditions under which the same is to be used, or if it allows too great a movement of the member 14, the member 2 is simply turned relative to the member 1, and the screw threads 6, 10 will cause the lower member to telescope upon the upper member. As the plate 12, is held by the upper member 1, the spring rests between the same and the bottom plate 7, and the spring will thus be compressed to a greater degree and will therefore be stiffer than before. This may be necessary for a heavy machine or where the typist has a heavy touch, or where it is desirable to reduce the extent of vertical movement of the machine. To release the compression of the spring the member 2 is simply turned in a reverse direction to move the members 2 and 1 farther apart. This will decrease the compression on the spring or relieve it altogether. This adjustment may be made in all the supports on the machine or in any number, according to requirements. For instance, it may be desirable to place the springs of the rearward supports under greater compression than those near the front of the machine or vice versa. It will be apparent that the adjustment can be easily and quickly made without detaching any of the parts.

With the parts shown, the supports are easily and quickly attached and detached and may be carried about as part of the machine, rather than having them a part of the desk or table. The spring absorbs all shocks, eliminates noise, and the spring may be placed under more or less compression to suit the requirements. The device is very simple and inexpensive.

Having described my invention what I claim is:—

A device for supporting typewriters, comprising a casing having an upper member provided with an aperture, and having a depending cylindrical portion, a bottom casing member having an aperture and provided with an upwardly extending cylindrical portion having a threaded connection with the cylindrical portion of the first casing member whereby the casing members may be relatively adjusted, a coiled spring in the casing, an apertured plate resting on

said spring and held in the casing, said plate having a depression to receive a typewriter leg, said depression extending into the coiled spring, a typewriter leg, and a screw adapted to pass through the aperture in the lower casing member and to secure said plate and leg to a typewriter.

Signed at the city, county and State of New York, this 18th day of December, 1911.

CHARLES C. LAPHAM.

Witnesses:
EDWARD D. C. SPERRY,
BENJAMIN FRANKLIN.